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Boston Medical Center

Delivery System Transformation Initiatives
Proposal for the Massachusetts Section 1115 Waiver
Demonstration Years 15 - 17

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INTRODUCTION

Boston Medical Center (BMC) is pleased to submit this proposal for the “Delivery System Transformation Initiatives” program under Massachusetts’ 1115 Medicaid Waiver. We are particularly excited to be part of this joint federal-state effort to move Massachusetts toward **high-quality, coordinated, accountable care** because we understand that the success of both Massachusetts health care reform and the Affordable Care Act depend on our ability as providers to accomplish the triple aim – better care, better health and lower costs.

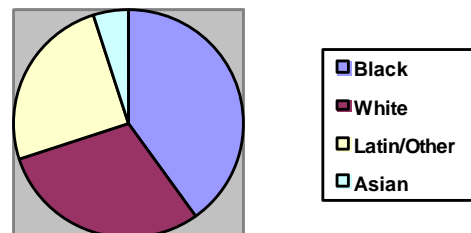
In the near term, the projects described herein will support the Patrick administration’s efforts to move toward more integrated systems of care, while simultaneously putting our state’s extraordinary efforts to increase access to affordable health insurance on a more sustainable path. In addition, these projects will support Boston Medical Center, the Commonwealth’s largest Disproportionate Share Hospital (DSH), and further our efforts to provide quality, cost-efficient care. DSH hospitals, such as BMC, are critical not only to the long-term success of health reform in Massachusetts, but also to the sustainability of the Affordable Care Act. We appreciate the opportunity to submit these projects and look forward to working with Massachusetts and the Centers for Medicare and Medicaid Services (CMS) as we implement.

BACKGROUND

Community Context

In general, Boston is a multicultural, multilingual city with a population of 621,363 (American Community Survey, 2010). BMC is the **largest source of safety net care** for Boston and its surrounding communities. Indeed, BMC is the only full-service hospital within the high poverty neighborhoods of Boston, providing specialty inpatient care and both trauma and primary outpatient care within the emergency room (ER). In particular, BMC services 67 percent of Boston’s trauma incidences. Located in the South End toward the Roxbury border, BMC is the primary source of care for some of the Boston neighborhoods with the **highest incidence of chronic disease as well as the highest percentages of racial and ethnic minorities**, including Roxbury, Dorchester, Mattapan and the South End. In particular, the neighborhoods served by BMC have the greatest level of health disparity in Boston with the highest rate of tuberculosis, low birth weight babies, asthma hospitalization, infant mortality, substance abuse treatment admissions, diabetes and mortality.

Figure 1: BMC Patients



Population Description

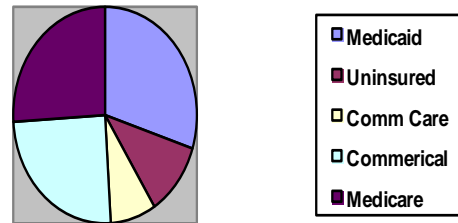
BMC's patient population is predominantly **minority, low-income and urban**. Approximately 70 percent of BMC's patients -- 93 percent of pediatric patients; 88 percent of maternity patients; and 73 percent of diabetic patients -- are racial or ethnic minorities. Thirty percent do not speak English as their first language.

Moreover, BMC cares for a high-percentage of **extremely low-income patients**.

Despite Massachusetts' efforts to provide quality, affordable care to all its residents, BMC's patient mix still includes

approximately 11 percent uninsured. In total approximately 75 percent of BMC's patients are low-income, disabled, elderly or uninsured.

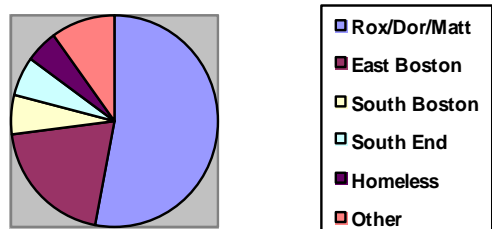
Figure 2: BMC Payer Mix (2010)



Indeed, more than 50 percent of BMC's patients have an annual income at or below \$20,420. Moreover, 36 percent of families in the pediatric emergency department reported reducing the size of their meals or skipping meals because they could not afford food. About half of our patients experience problems paying their utility bills, with many reporting utility shut-offs or using a stove to heat their homes.

In general, BMC's patients are **local to the community** and its surrounding areas. Approximately 65 percent of BMC's system-wide patients are Massachusetts residents and are concentrated in Roxbury, Dorchester and Mattapan. These ties to the community are unique to BMC among academic medical centers in the region. Nearly all of the Community Health Center patients -- who are routinely referred to BMC for acute care -- are from Boston and are concentrated as described in the chart below.

Figure 3: BMC CHC Patients (2009)



In general, BMC's patient population has an **elevated prevalence of chronic diseases** (diabetes, hypertension, congestive heart failure, asthma) and poor adherence to multiple medications and physician recommendations is commonplace. Moreover, co-morbid mental health and substance use disorders are highly prevalent.

Social problems that interfere with health are also prevalent, and include, for instance, food, housing, and income insecurity; lack of social supports; family dysfunction; linguistic and sociocultural differences; homelessness; and low reading and health literacy. Together, the high rates of chronic illness, comorbid behavioral health issues, and social problems impact health care costs dramatically for our patients.

Health System Description

Boston Medical Center (BMC) is an integrated health care delivery system serving hundreds of thousands of underserved and working class individuals in Boston and its surrounding neighborhoods. We are devoted to the proposition that every person, regardless of his or his social or economic circumstances, deserves the best health care. Through integrated delivery, BMC combines a community-based, primary care approach with the largest Level 1 Trauma Center in New England; designated emergency behavioral services; and interpreter services that handle nearly 200,000 medical interpretations a year. Specifically, the BMC system includes:



- **Boston Medical Center.** 626 bed academic medical center – the largest safety net hospital in New England. BMC was created in 1996 as the country’s first full asset merger of two public hospitals with a private academic medical center. The merger allowed the nearly 150-year mission of Boston City Hospital – to serve all regardless of their ability to pay – to endure. BMC services more than 130,000 emergency visits per year and approximately 30,000 discharges.
- **Boston HealthNet (BHN).** An affiliation of BMC, the Boston University School of Medicine and 15 community health centers. Specifically, this includes 1,600 physicians and more than 650 primary care physicians who provide care to over 334,000 patients a year through more than 1.2 million visits. BHN partners provide outreach, prevention, primary care, specialty care and dental services.

- **BMC Physician Practice Plans.** Twenty-two physician practices with over 800 physicians who perform robust primary care on the BMC Campus and specialty sessions at BMC's affiliated community health centers.
- **BMC HealthNet Plan (BMCHP).** A licensed, NCQA-accredited, statewide, 227,000 member capitated managed care organization (MCO) for low-income patients. NCQA ranked BMCHP third on its list of best Medicaid MCOs in the country. BMCHP is the largest MCO serving Massachusetts Medicaid and Commonwealth Care beneficiaries.

As an academic safety net system, education, training and teaching are also integral components of the BMC system. Boston Medical Center operates 85 residency training programs with a large emphasis on primary care training. Specifically, BMC is the primary teaching affiliate of the Boston University School of Medicine. In addition, BMC also received more than \$137 million in sponsored research funding in 2011 and currently oversees 574 research and service projects.

Finally, BMC's commitment to delivery system transformation is central to understanding the system's core mission and vision. Described further below, the entire system – including the highest levels of system leadership – support and are actively taking steps to prepare for more accountable, coordinated, patient-centered care for our state's most vulnerable.

Strategic Vision

In 2011, BMC embarked on a strategic planning process with the goal of identifying a pathway that would allow us to continue to provide crucial and exceptional care without exception. As a system, we recognized and continue to recognize that we will face ongoing pressure to reduce costs while preserving – and even increasing – the quality of care we provide to patients. In particular, lower payment levels from both public and commercial payers as well as increasing pressure caused by federal and state budget crises has stressed our financial stability. Understanding this reality, BMC engaged McKinsey and Company to complete an analysis of our current business model and propose options for a sustainable pathway forward.

In general, the conclusions reached were consistent with BMC's underlying recognitions that all health care stakeholders – particularly providers – must commit to moving away from fee-for-service payment and toward more accountable, coordinated, cost-efficient care that delivers better health for patients. Further, BMC also understands that as residents of Massachusetts and as Americans, we must work to reduce the rate of health care cost growth so that our State and our nation can afford quality health care for all into the future.

As such, BMC has put forward a strategic vision that includes three core components:

- **Provide the right care for every patient, no less...no more.** In essence, this means BMC is committed to providing the right care for the right patient at the right time in the right location by the right staff and at the right price. BMC recognizes that this may mean delivering less, rather than more, care to some patients.
- **Operate as the lowest cost, highest performing health care provider.** BMC's focus in this regard will center on merging the quality focus described above with efficient management of administration as well as patient care. BMC's commitment to low cost care has been ongoing. In particular, BMC engaged FTI Consulting in 2010 to identify and implement cost reduction initiatives. As a result, BMC has implemented aggressive cost-cutting measures over the past 3 years.
- **Lead the transformation away from fee-for-service payments toward accountable, integrated care.** BMC has already taken concrete steps toward this goal. For example, BMC has established an executive-level steering committee to lead the transformation of the system into an Accountable Care Organization (ACO). As part of this process, BMC has also created four standing subcommittees to help inform the development of an operational ACO at BMC, including: Finance, Clinical, Quality, and Information Technology. In addition, BMC has taken a thought leadership role in accountable care at the federal level. Building on language included in the Affordable Care Act by Senator Kerry authorizing a Medicaid global payment in up to five states, BMC worked with like-minded systems, including Denver Health, NYHHC, and Memorial Health System, to conceptualize, design and promote a Medicaid global payment demonstration. Through the course of this work, BMC received valuable feedback on its accountable care design, quality metrics and financial models from experts at the Brookings Institute, Center for American Progress, Center on Budget and Policy Priorities, National Partnership for Women and Families as well as the White House Office of Health Reform, and the Center for Medicare and Medicaid Innovation and the Medicare-Medicaid Coordination Office at CMS. BMC very much looks forward to using this experience in furthering the transformative efforts included in this 1115 Waiver. Finally, as part of this transition away from fee-for-service payment design, health care stakeholders must work together to rationalize various reimbursement rates, including Medicaid, to reduce cost-shift and increase price transparency in the system.

BMC's ultimate goal is to become a fully accountable organization responsible for delivering quality, cost-efficient care to all of its patients, regardless of their ability to pay. The strategic vision described above is board-approved and therefore maintains the highest level of support from BMC's leadership. In addition, BMC has hired a physician leader to manage the implementation of the strategic vision into the future.

We wholeheartedly embrace Governor Patrick's goals for more integrated accountable care in Massachusetts and understand that delivery system transformation is critical to the

long-term sustainability of the Affordable Care Act. Further, we appreciate that the move away from fee-for-service payment must be done within the context of the triple aim – quality must rise, costs must be controlled and patients must live healthier lives.

While we anticipate that it will take four to six years for BMC to fully transform to a coordinated, accountable organization across all payers, we believe that meaningful achievements can be made in the short-term. The projects designed in this proposal will help lay the groundwork for full delivery system transformation and we look forward to working with the State and CMS to reach our ultimate goals as an organization.

Statement Related to Directly Funded Initiatives by the U.S. Department of Health and Human Services

BMC has designed its DSTI projects in a manner that does not duplicate federal Health and Human Services funding for the same projects. There are projects within our DSTI effort that build upon HHS pilots such as Project RED and the Commonwealth's Patient Centered Medical Home Initiative (PCMHI).

The BMC Project RED DSTI effort does not receiving federal funding from HHS. As described in detail within the project description, this project is a significant effort to translate the research pilot that has received NIH and AHRQ funding in the past, into day to day hospital practice.

In the case of BMC's DSTI PCMH project, as detailed within our project description, the scope of the BMC DSTI PCMH effort is much broader than the base of technical support that is the focus of the Commonwealth's effort. One of the BMC primary care practice, Family Medicine, participates in the Commonwealth of Massachusetts PCMHI initiative. This effort, as detailed within the project description, is a significant expansion of that PCMHI activity and, with the inclusion of BMC's General Internal Medicine primary care practice, expands PCMH higher level coverage to approximately 74% of the BMC primary care patient population by the end of the Waiver period.

BMC will provide updates on our participation in any new HHS-funded initiatives related to our DSTI projects in our biannual DSTI progress reports to be submitted to the Commonwealth.

EXECUTIVE SUMMARY

As described above, both the three- and five-year visions for BMC center around a thoughtful transition away for fee-for-service payment and toward accountable, patient-centered, coordinated care. We believe we are well-positioned to meet this primary goal over the next four to six years, but recognize that we must accelerate our meaningful steps toward this objective, particularly over the three year course of the current Medicaid waiver. BMC also understands that it faces significant challenges in the coming years – budgetary pressures, reimbursement levels and the overall financial strain of our partners will all test our ability to provide exceptional care to all of our patients for increasingly efficient costs.

As such, the projects described in this document not only all bring BMC closer to better care, lower costs and improved patient health, but also lay the foundation for a fully accountable health system – our ultimate goal. In addition, the projects outlined below will reinforce and support each other as well as across the goals of the triple aim.

For example, our **Practice Support Center**, to be staffed by a thoroughly trained and skilled team of Patient Care Assistants (PCAs) located at a centralized call center, will not only improve the patient experience, but also give doctors more time to focus on primary care, rather than administration. The Practice Support Center is the foundation for development and implementation of care coordination since it allows physicians to practice at the top of their license providing primary care while new PCAs will be utilized to manage the pre and post visit requirements. In turn, physicians will be well-positioned to focus their efforts on **Patient Centered Medical Home (PCMH)** practice requirements and certification. Over time, PCMH will lead to more coordinated care, healthier patients and lower costs.

Meanwhile, the **Diabetes Rapid Referral** program will seek to get increasing numbers of patients connected to a primary care access point to better manage their diabetes – eventually feeding increasing numbers of high-cost patients into PCMHs. **Project RED** will reinforce this trend by helping to keep patients out of the hospital and in more appropriate, cost-effective care settings. Likewise, PCMHs will help keep patients at risk for high readmissions from returning to the inpatient setting, furthering Project RED outcomes.

On a parallel track, BMC will also be working to complete the tasks necessary to operationally **become an accountable care organization**, while also addressing underlying cost and quality drivers through increased training programs at its **Simulation Center**. The Simulation Center will provide clinicians with an optimal learning environment in which teamwork, collaboration, skills building and communication are developed in a manner that is practiced out of harms way for the patient. We believe that this environment of routine, required and frequent simulation will create optimal patient outcomes from a quality perspective and improve our costs through the reduction in medical errors and malpractice liability.

BMC's efforts are strongly aligned with the Triple AIM goals of the Affordable Care Act along with Massachusetts' goals of health care reform. As each of our DSTI projects is a reflection of our overarching five year strategic goal of making BMC a leader in the transformation of health care delivery to a more patient centric manner of care, so too are our Category 4 goals. The identification and tracking of these quality measures will ensure that BMC's efforts of delivery system transformation are guided by the monitoring of the critical principles of better patient care, better health and cost effective care. Through careful tracking of these measures, we can ensure that our strategic planning efforts are aligned with these important measures.

In total all of these projects represent meaningful steps toward a high-performing, coordinated, accountable health system.

Project Title	Description	Three Year Goals
Category 1 – Further Development of a Fully Integrated Delivery System:		
1.1 Patient Centered Medical Home	BMC will position the majority of its primary care practices, who see more than 35,000 patients, to apply for NCQA, or comparable, certification as a patient centered medical home (PCMH).	By the end of Year 3, BMC will be recognized as an NCQA-2011 PCMH having achieved level 1 certification for 2 of our primary care practices, representing 74% of our primary care patients, Additionally, BMC will apply for at least Level 2 NCQA PCMH status in Year 3.
1.2 Practice Support Center	The Practice Support Center will operate seven days per week and supports the practice in improving the patient experience of care delivery, access and quality. The model will seek to provide first call resolution of patient needs and concerns, optimize scheduling protocols to improve efficiency and access, improved pre-visit planning for patients so their primary care visit is optimized, care follow through for care gaps and preventive health gaps, and referral and case management to optimize care coordination within the Medical Center. This effort is integral to the development of a medical home as it provides resources for the primary care practice and a mechanism for implementation and outreach of quality improvement efforts to our patient population. We look to utilize trained Patient Care Assistants in messaging to patients and outreach efforts via practice developed protocols, thereby creating a more team based approach to care and care delivery.	This effort will ultimately provide for greater primary care visit access within the practice. The Support Center will also assist in outreach calls to patients within the Medical Home to address care gaps and missing links in care coordination and chronic disease management. By the end of Year 3, Boston Medical Center will have implemented fully a Practice Support Center that has demonstrated improved practice quality, efficiency and patient experience.

Project Title	Description	Three Year Goals
Category 2 – Improved Health Outcomes & Quality:		
2.1 BMC Simulation and Nursing Education Center	BMC will develop and implement an innovative training center for clinical staff that will enhance the patient experience of care while improving the communication and procedural skills of multi-disciplinary teams. During year 2 teams training, crew resource management, trigger recognition and early rescue patient’s strategies will be rolled out with safety checklists. Communication drills will occur in the areas of apology, disclosure, interdisciplinary conflict, and cultural competency. BMC will design and implement a Simulation and Nursing Education Center to promote patient safety and the delivery of high-quality healthcare through education, training and research for clinicians. Programs will utilize experiential, simulated scenarios and participatory courses to focus on effective communication, collaboration, crisis management and cultural competency.	In order to track the effectiveness of simulation training and improvements in care, number of sessions attended will be tracked and maintained while tracking core measures, mortality data, leapfrog, NSQIP, UHC and other outcome measures including malpractice claims. Simulation will serve as a lever for cultural transformation to create a culture of safety to minimize readmissions and avoidable complications. In year 2, the training curriculum will be fully developed, a training schedule will be rolled out and the first clinical staff will be trained. In year 3, training will continue across multi-disciplinary teams at BMC with 1,000 clinical staff trained. Ultimately, in out years after the Waiver period, BMC will roll out training to all multi-disciplinary teams.
2.2 Rapid Diabetes Referral and Follow up	BMC will design and implement a program to coordinate care for patients who present with symptoms of suboptimally-controlled diabetes in the emergency room. In particular, this program will divert unnecessary admissions by connecting patients with more appropriate care settings.	By Year 3, BMC will have implemented the Diabetes Rapid Referral program for BMC patients with diabetes, with metrics associated with number of patients evaluated for the program. We will also review data to develop additional care management strategies and begin to explore additional mechanisms to enhance quality in the program.

Project Title	Description	Three Year Goals
2.3 Project RED	BMC will expand on its successful Project RED pilot program to standardize and personalize the complex hospital discharge process and focus on reducing unnecessary readmissions and Emergency Department visits within 30 days following hospital discharge.	By Year 3, BMC will utilize Project RED for an additional 960 patients over July 1, 2011 levels. We will track readmission rates for RED patients and compare readmissions data for expanded population, where payer data is available, to baseline data.
Category 3 - Ability to respond to statewide transformation to value-based purchasing and to accept alternatives to fee-for-service payments:		
3.1 ACO Development	The Boston Medical Center (BMC)/Boston HealthNet (BHN) integrated delivery system will further develop expertise, as well as develop an operational work plan, in preparation for establishing an accountable care organization (ACO) to coordinate all care for enrolled patients, accept and manage financial risk, and increase the quality of care delivered to its patients.	By Year 3, BMC will implement appropriate components of the work plan that will best lead BMC to become a high quality, risk-bearing ACO.
3.2 Learning Collaborative	Through this project, each hospital participating in DSTI will join an existing learning collaborative – such as the Brookings-Dartmouth ACO Learning Network or another ongoing learning collaborative that aligns with DSTI goals – or will develop a new learning collaborative designed to support its transformation goals.	The health care delivery system is undergoing tremendous transformation throughout the country and, particularly, within Massachusetts. Participation in the learning collaborative will facilitate BMC’s ability to transition to higher quality, patient focused, alternative payment systems through access to best practices addressing similar needs. Information gained through the collaborative will help inform future strategic efforts for BMC.
Category 4 - Population-Focused Improvements:		

Project Title	Description		Three Year Goals
4.1	Common Measures as listed below and described in detail in Category 4 description at end of document.		The goal of reporting on these population-focused measures is to reflect on the impact of the investment and system changes of BMC's overall DSTI effort. The information gathered through reporting of these goals will allow BMC to better understand the impact of its efforts on the Triple AIM of Better Care, Better Health and Cost Effective Care.
	#	Measure Description	Reporting Schedule
	4.1.1	Care Transitions Measure Set (CTM-3)	<ul style="list-style-type: none"> Report measure in FY14
	4.1.2	Patients who reported that staff "Always" explained about medicines before giving it to them.	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.1.3	Patients at each hospital who reported that YES, they were given information about what to do during their recovery at home.	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.1.4	ED Wait Time: Door to Diagnostic Evaluation by a Qualified Medical Personnel	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.1.5	Pneumonia Immunization	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.1.6	Influenza Immunization (seasonal measure)	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.1.7	Percent of discharged patients under age 75 who were hospitalized for Chronic Obstructive Pulmonary Disease (Ambulatory Sensitive-Condition Admissions Measure)	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.1.8	Percent of discharged patients under age 75 who were hospitalized for Congestive Heart Failure (Ambulatory Sensitive-Condition Admissions Measure)	<ul style="list-style-type: none"> Report measure in FY13 and FY14

Project Title	Description		Three Year Goals
	#	Measure Description	Reporting Schedule
	4.1.9	Low Birth Weight Rate: number of low birth weight infants per 100 births ¹	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.1.10	Hospital 30-day, all-cause readmission rate to the index hospital following a hospitalization for all patients 18 and older (not risk adjusted)	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.1.11	Percent of Emergency Department visits for children age 18 or less with a primary diagnosis of asthma--Ambulatory Sensitive-Condition	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.1.12	Percent of patients with elective vaginal deliveries or elective cesarean sections at greater than or equal to 37 weeks and less than 39 weeks of gestation completed ²	<ul style="list-style-type: none"> Report measure in FY13 and FY14
4.2	BMC Specific Quality Measures as listed below and described in detail in Category 4 description at end of document.		BMC's hospital specific measures and linked to each of our DSTI projects in categories 1, 2 and 3, with the exception of the Learning Collaborative. Measures were carefully selected to allow identify those that would provide the most insight into the impact of patient care resulting from the DSTI project.
	#	Measure Description	Reporting Schedule
	4.2.1	Medical practice satisfaction: overall rating score on Medical Practice Survey for two large medical practices. (Press Ganey)	<ul style="list-style-type: none"> Report measure in FY13 and FY14

¹ Hospitals without maternity services are exempted from this measure.

² Hospitals without maternity services are exempted from this measure.

Project Title	Description		Three Year Goals
	#	Measure Description	Reporting Schedule
	4.2.2	Medical practice satisfaction: percent of patients answering good or very good for ease of scheduling appointments for GIM primary care practice. (Press Ganey)	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.2.3	Percent of infants delivered vaginally with shoulder dystocia. (Customized Measure)	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.2.4	Failure to Rescue Rate: Deaths per 1,000 patients having developed specified complications of care during hospitalization. (AHRQ PSI 39)	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.2.5	Percent of patients 18-75 of age with diabetes who received one or more A1c test(s) per year. (NQF 0057)	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.2.6	Repeat ED visit rate (Customized Measure)	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.2.7	Percent of parents or caregivers of patients enrolled in Project RED ages 18 – 65, admitted for medical care (non-surgical and non-maternity) to a specific cohort, who receive a hospital after care plan at discharge. (Customized Measure)	<ul style="list-style-type: none"> Report measure in FY13 and FY14

Project Title	Description		Three Year Goals
	#	Measure Description	Reporting Schedule
	4.2.8	Percentage of patients who were identified as having persistent asthma and who were dispensed a prescription for either an inhaled corticosteroid or acceptable alternative medication during the measurement year. (NQF 0036)	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.2.9	Heart failure: percentage of patients aged greater than or equal to 18 years with diagnosed heart failure (HF) who also have left ventricular systolic dysfunction (LVSD) who were prescribed angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy. (NQMC-1976)	<ul style="list-style-type: none"> Report measure in FY13 and FY14
	4.2.10	Comprehensive diabetes care: percentage of members 18 through 75 years of age with diabetes mellitus (type 1 and type 2) whose most recent hemoglobin A1c (HbA1c) level is greater than 9.0% (poorly controlled). (NQMC-6217)	<ul style="list-style-type: none"> Report measure in FY13 and FY14

Category 1 – Further Development of a Fully Integrated Delivery System

BMC Project 1.1: Patient Centered Medical Home

(Master Plan Project 1.1: Patient Centered Medical Home)

Goal: BMC will develop and implement, over the three year period, steps necessary to position the majority of our primary care practices to apply for NCQA Patient Centered Medical Home (PCMH) certification (by 2011 NCQA criteria). Currently Boston Medical Center has four primary care practices on campus—the General Internal Medicine (GIM) Practice comprised of approximately 27,000 patients, the Family Medicine (FM) Practice comprised of approximately 8,000 patients, the Pediatrics practice comprised of 10,000 patients and the Geriatrics practice that follows approximately 2,500 patients. We seek to evolve the GIM and FM practices, together managing 74% of BMC’s primary care patients, to a PCMH during this effort. In the current state neither of these practices is NCQA Medical Home certified. However, each of these practices have worked to lay the ground work of PCMH transformation in establishing daily huddles with staff and providers, assessing cycle time for patients to flow through the practice, working with their individual phone staff in improving operations and efficiency, working to improve new patient access and improving attribution of patients to PC provider panels. In this effort at practice transformation, the GIM and FM practices will develop support for case management, analytic support and training. In addition, enhanced IT integration between hospital systems and participating practices is an important element to meet standards for transition of care, follow up after emergency room visits and inpatient discharges, tracking of test results and referrals, and patient registries. The focus of the project will be on the achievement of the six NCQA PCMH standards, each of which requires enhanced infrastructure and operational capabilities. Examples of critical infrastructure that will be developed include:

- I. Enhanced Access and Continuity
 - a. Team based care with trained staff and providers
- II. Identify and Manage Patient Populations
 - a. Patient registries and analytics to evaluate care gaps
- III. Plan and Manage Care
 - a. Case managers and medication reconciliation
- IV. Provide Self Care and Community Support
 - a. Patient education materials and community linkages
- V. Track and Coordinate Care

- a. Track test results, ER visits and hospitalizations to ensure adequate patient follow- up
- VI. Measure and Improve Performance
 - a. Data analysis and a formal quality improvement program

NCQA is a nationally recognized agency that has developed stringent standards for awarding recognition, or certification, at 3 distinct levels based upon a primary care practice's readiness. The BMC primary care practices are at the early stages of assessing the NCQA PCMH requirements and our DSTI project reflects the reality that we are starting at the beginning of this arduous process. We are committed to aggressively working to identify the NCQA requirements, assess our needs for enhancements and improvements to address such requirements and design and implement a work plan that will allow 2 of our major primary care practices, representing 74% of our patients, to become NCQA recognized by the end of the 3 years.

Rationale: The move to a NCQA-2011 defined certified Patient Centered Medical Home (PCMH) by our primary care practices is at the core of ensuring that we are well equipped to provide the right care, in the right setting at the right time. This effort is directly aligned with the goals of the Commonwealth and the Affordable Care Act. By seeking NCQA certification, these primary care practices will ensure that the PCMH efforts are designed to be operated in a manner that will ultimately be consistent with national, best in class efforts. BMC's Family Medicine primary care practice already participates in the Commonwealth's PCMH initiative. This project will expand that effort while also readying our largest primary care practice, GIM, for NCQA status.

Expected Results: By the end of Year 3, BMC will be accredited as a NCQA-2011 Patient Centered Medical Home, achieving at least Level 1 certification in 2013 and applying for at least Level 2 NCQA status in 2014 for 2 of its larger primary care practices, GIM and Family Medicine, which provide care to 74% of BMC's on campus primary care patient population. Primary care patients at these two practices are already assigned to a primary care physician and, at the point of NCQA PCMH accreditation, BMC expects all of its primary care patients from GIM and FM – estimated in SFY 2012 to be approximately 35,000 in total – to continue receiving care under a PCMH.

Relation to other Projects: PCMH efforts are at the heart of most initiatives supported by our hospital within the Waiver. In particular, our PCMH efforts will be complemented by the creation of the Practice Support Center and will provide a solid foundation for our movement toward an Accountable Care Organization.

Project 1.1: Patient Centered Medical Home (Master Plan Project 1.1)		
SFY 2012	SFY 2013	SFY 2014
<p>1.1.1 Milestone: Establish a PCMH work group and complete gap analysis for GIM and FM Practices.</p> <p>1.1.1 Metric(s): (1) (MP-P 3)³ Document creation of BMC PCMH work group to review NCQA requirements for PCMH accreditation. (2) (MP-P 4) Create a gap analysis for GIM and FM practices to determine areas that require operational and resource infrastructure to become a NCQA PCMH.</p> <p>1.1.1 Data Source: Internal Hospital records NCQA requirements</p> <p>1.1.2 Milestone: Initiate an action plan for each primary care site—GIM and FM.</p> <p>1.1.2 Metric(s): (3) (MP-P 4) Documentation of action plan efforts toward PCMH accreditation at each site. (4) (MP-P 4) Identify internal and</p>	<p>1.1.1 Milestone: Complete action plan for GIM and FM primary care sites to determine areas that require infrastructure and operational improvement to become a PCMH.</p> <p>1.1.1 Metric: (1) (MP- P 4) Documentation of action plan completion toward PCMH accreditation at each site (GIM and FM).</p> <p>1.1.1 Data Source: Internal Hospital records</p> <p>1.1.2 Milestone: Establish Quality Committee for GIM and FM practices.</p> <p>1.1.2 Metric: (2) (MP-P 19) Documentation of monthly QI committee meeting minutes that reviews Quality Dashboard performance.</p> <p>1.1.2 Data Source: Internal Hospital Records Quality Dashboard NCQA Requirements</p> <p>1.1.3 Milestone: Work to improve baseline performance and data</p>	<p>1.1.1 Milestone: Submit application for at least Level 2 PCMH recognition by NCQA-2011 criteria.</p> <p>1.1.1 Metric(s): (1) (MP-P 6) Documentation related to implementation of findings from gap analysis (2) (MP-I 1) Document meeting at least Level 2 NCQA-2011 PCMH accreditation criteria for FM and GIM practices. (3) (MP-I 2) Document submission of NCQA application for at least Level 2 certification. (4) (MP-I 5) All primary care patients assigned to FM and GIM practices, estimated in SFY 2012 to be approximately 35,000 in total, will continue to receive care under an NCQA Patient Centered Medical Home.</p> <p>1.1.1 Data Source: Internal hospital records NCQA application</p> <p>1.1.2 Milestone: Expand performance improvement</p>

³ “MP-P X” stands for Master Plan – Process Measure #X; similarly, “MP-I X” stands for Master Plan – Improvement Measure #X.

Project 1.1: Patient Centered Medical Home (Master Plan Project 1.1)		
SFY 2012	SFY 2013	SFY 2014
<p>external resources to be allocated to each site to prepare for application of certification.</p> <p>1.1.2 Data Source: Internal Hospital records</p> <p>1.1.3 Milestone: Establish baseline data for preventive health measures.</p> <p>1.1.3 Metric(s) (5) (MP-P 17) Establish baseline rate of influenza vaccination in participating primary care practices.</p> <p>1.1.3 Data Source: BMC Medical Records</p>	<p>capture of 1 preventive health measure.</p> <p>1.1.3 Metric(s): (3) (MP-I 10) Influenza vaccination rate for population.</p> <p>1.1.3 Data Source: Internal Hospital Records</p> <p>1.1.4 Milestone: Submit application for NCQA-2011 Certification for Level 1 Medical Home for GIM and FM practices.</p> <p>1.1.4 Metric(s): (4) (MP-I 2) Documentation of BMC’s ability to meet criteria for Level 1 PCMH (application for NCQA recognition). (5) (MP-I 4) Achieve at least NCQA 2011 Level 1 recognition.</p> <p>1.1.4 Data Source: BMC files NCQA documentation</p> <p>1.1.5 Milestone: Address action plan items for seeking at least Level 2 NCQA PCMH Certification.</p> <p>1.1.5 Metric(s): (6) (MP-I 3) Initiate and improve referral tracking (7) (MP-I 3) Establish and document patient self care and patient education in EMR.</p> <p>1.1.5 Data Source:</p>	<p>program to 1 cancer screening measure. Ongoing performance improvement in prior year selected measure.</p> <p>1.1.2 Metric: (5) (MP-I 11) Improve by 3% Influenza Vaccination in GIM and Family Medicine Practices from FY 12 baseline measure. (6) (MP-I 11) Measure baseline rate of Cervical Cancer Screening in GIM and FM</p> <p>1.1.2 Data Source: Internal Hospital Records Populations.</p>

Project 1.1: Patient Centered Medical Home (Master Plan Project 1.1)		
SFY 2012	SFY 2013	SFY 2014
	Internal Hospital records	

Category 1– Further development of an integrated delivery system

BMC Project 1.2: Practice Support Center

(Master Plan Project 1.5: Practice Support Center)

Goal: Boston Medical Center will develop and establish a Practice Support Center, encompassing a dedicated call center and outreach for improved care management functions , over a three year period to support the General Internal Medicine Primary Care Practice. The GIM practice is our largest on campus primary care practice that incorporates over 50 primary care physicians and nurse practitioners, and is responsible for the care of over 27,000 patients.

In the current state, the GIM practice has long waits for patients—long waits for our patients to get through to the practice via the phone system, and long waits for patients to get appointments with their provider. The GIM practice also has limited access for new patients and for existing patients with urgent clinical needs. The practice has a high no show rate and a significant number of unsupported patient needs that lead to highly variable patient care sessions and poor patient flow. All this results in poor provider, staff, and patient satisfaction in the practice. Additionally we have high rates of utilization of the emergency department even during business hours of the practice.

Boston Medical Center seeks to develop a practice support center that operates seven days per week and supports the practice in improving the patient experience of care delivery, access and quality. The model will seek to provide first call resolution of patient needs and concerns, optimize scheduling protocols to improve efficiency and access, improved pre-visit planning for patients so their primary care visit is optimized, care follow through for care gaps and preventive health gaps, and referral and case management to optimize care coordination within the Medical Center. This effort is integral to the development of a medical home as it provides resources for the primary care practice and a mechanism for implementation and outreach of quality improvement efforts to our patient population. We look to utilize trained Patient Care Assistants in messaging to patients and outreach efforts via practice developed protocols, thereby creating a more team based approach to care and care delivery.

Core activities will include:

- Timely phone access with aim toward high level of First Call Resolution of issues and improved patient satisfaction;
- Follow up with patients after inpatient discharge and access to timely primary care follow up appointments, as appropriate;

- Provide patient education about important public health and community initiatives and outbound call reminders for chronic care conditions and care gaps.

Rationale: The benefits of the Practice Support Center will be to provide timely access to our patients for appointment scheduling; to direct patients to the most appropriate resource within the practice and medical center for clinical and administrative inquiries; and to improve patient care and flow through the practice by better managing administrative and process issues. We also anticipate that as we develop a medical home, the recruitment of clinically trained staff with a multiplicity of skill sets will help us in care coordination and addressing care gaps without always requiring a visit and promoting efficiency of care delivery. The use of extended hours including weekend and evening hours to manage appointments improves our overall access to the practice by decreasing no-show rates and improving slot utilization and improves practice efficiencies.

Expected Results: The Practice Support Center will be comprised of a thoroughly trained and skilled team of Patient Care Assistants. Performance standards, customer service, and quality monitoring will be incorporated into the training and ongoing evaluation process. By providing the appropriate assistance to incoming callers who would otherwise be directed to the clinical practice office, the Patient Care Assistants allow the physicians, and the clinical practice, to focus on patient care, and not administrative efforts, at the time of the patient's appointment. This effort will ultimately provide for greater primary care visit access within the practice. The Support Center can also assist in outreach calls to patients within the Medical Home to address care gaps and missing links in care coordination and chronic disease management. By the end of Year 3, Boston Medical Center will have implemented fully a Practice Support Center that has demonstrated improved practice quality, efficiency and patient experience

Relation to other Projects: The Practice Support Center will be a linchpin in BMC's efforts to move toward Patient Centered Medical Homes in the General Internal Medicine Primary Care Practice. As such, our Practice Support Center will not only improve the patient experience, but also give primary care providers more time to focus on the active clinical issues of the patient and less time on administrative issues or routine issues that can be ordered or managed as per protocol, primary care, rather than administration. In turn, physicians will be well-positioned to focus their efforts on Patient Centered Medical Home (PCMH) practice requirements and certification.

Project 1.2: Practice Support Center (Master Plan Project 1.5)		
SFY 2012	SFY 2013	SFY 2014
<p>1.2.1 Milestone: Develop staffing plan and recruitment of appropriate number of Patient Care Assistants</p> <p>1.2.1 Metric(s): (1) (MP-P 1) Job descriptions (2) (MP-P 1) Staffing schedule based on call analysis and demand</p> <p>1.2.1 Data Source: Department records</p> <p>1.2.2 Milestone: Designate and design space plan for Practice Support Center</p> <p>1.2.2 Metric: (3) (MP-P 2) Space plan that includes IT, Telecom, furniture inclusive of occupational ergonomic review</p> <p>1.2.2 Data Source: Hospital and department project plans</p> <p>1.2.3 Milestone: Develop training and curriculum program for Patient Care Assistant staff</p> <p>1.2.3 Metric: (4) (MP-P 3) Training plan and curriculum document</p> <p>1.2.3 Data Source:</p>	<p>1.2.1 Milestone: Implement quality assurance and monitoring program</p> <p>1.2.1 Metric: (1) (MP-I 8) 65% of calls answered within 30 seconds and less than 10% of calls abandoned</p> <p>1.2.1 Data Source: Department records</p> <p>1.2.2 Milestone: Implement outbound call program to provide reminder calls</p> <p>1.2.2 Metric: (2) (MP-I 9) Staff will have contact with 50% of scheduled new patients to confirm appointment and review clinical information.</p> <p>1.2.2 Data Source: Department records and medical records</p> <p>1.2.3 Milestone: Select appropriate Press Ganey Survey question to trend and target for patient experience improvement</p> <p>1.2.3 Metric: (3) (MP-I 10) One survey question will be selected that have direct relationship with the work of the Practice Support Center</p>	<p>1.2 1 Milestone: Improved quality assurance and monitoring program</p> <p>1.2.1 Metric: (1) (MP-I 8) 70% of calls answered within 30 seconds and less than 5% of calls abandoned</p> <p>1.2.1 Data Source: Department records</p> <p>1.2.2 Milestone: Expand outbound call program to provide reminder calls</p> <p>1.2.2 Metric: (2) (MP-I 9) Staff will have contact with 60% of scheduled new patients to confirm appointment and review clinical information</p> <p>1.2.2 Data Source: Department records and medical records</p> <p>1.2.3 Milestone: Meaningful implementation of outbound call effort related to one chronic care condition or preventative care gap.</p> <p>1.2.3 Metric: (3) (MP-I 5) % of patients reached by phone with unfulfilled preventative care gap</p>

Project 1.2: Practice Support Center (Master Plan Project 1.5)		
SFY 2012	SFY 2013	SFY 2014
<p>Department training plan and orientation</p> <p>1.2.4 Milestone: Complete staffing and recruitment of full complement of staff. Open Practice Support Center for incoming calls</p> <p>1.2.4 Metric: (5) (MP-P 4) Practice Support Center open to accept inbound scheduling calls</p> <p>1.2.4 Data Source: Department records</p> <p>1.2.5 Milestone: Develop and collect baseline level data set:</p> <ul style="list-style-type: none"> a. Call volume b. Service level c. Abandonment rate d. Patient satisfaction e. Appointment access <p>1.2.5 Metric (6) (MP-I 2) Develop the baseline data report in year one</p> <p>1.2.5 Data Source: Department records</p> <p>1.2.6 Milestone: Understand baseline measures for reasons</p>	<p>1.2.3 Data Source: Department records</p> <p>1.2.4 Milestone: Complete an action plan to address one chronic care condition or preventative care gap that would be amenable to an outbound reminder call effort.</p> <p>1.2.4 Metric: (4) (MP-P 6) Document one action plan for an outreach effort from the Patient Support Center for a care gap</p> <p>1.2.4 Data Source: Department records</p> <p>1.2.5 Milestone: Develop report tool to identify number of patients seen in primary care after inpatient discharge</p> <p>1.2.5 Metric: (5) (MP-I 3) Baseline data for % of patients seen in primary care within 3 weeks of inpatient hospital discharge</p> <p>1.2.5 Data Source: Department records</p> <p>1.2.6 Milestone: Improve Patient Access</p> <p>1.2.6 Metric:</p>	<p>1.2.3 Data Source Department records</p> <p>1.2.4 Milestone: Complete action plan for meaningful improvement of % of patients seen within 3 weeks after inpatient hospital discharge</p> <p>1.2.4 Metric: (4) (MP-I 4) % of patients seen in primary care within 3 weeks of inpatient hospital discharge</p> <p>1.2.4 Data Source: Department Records</p> <p>1.2.5 Milestone: Improve Patient Experience in getting through to the practice by phones.</p> <p>1.2.5 Metric: (5) (MP-I 7) Improve patient satisfaction in “ease of getting through to the practice by phone” by 2 percent.</p> <p>1.2.5 Data Source: Departmental Records.</p>

Project 1.2: Practice Support Center (Master Plan Project 1.5)		
SFY 2012	SFY 2013	SFY 2014
<p>patients are calling.</p> <p>1.2.6 Metric: (7) (MP-P 7) Develop report on most common reasons for call and distribution of calls in each grouping.</p> <p>1.2.6 Data Source: Departmental records</p> <p>1.2.7 Milestone: Understand patient access</p> <p>1.2.7 Metric: (8) (MP- P8) Develop report on no-show rate and patients seen per session (measure of practice efficiency)</p> <p>1.27 Data Source: Departmental records</p>	<p>(6) (MP-I 6) Decrease no show rate by 2% from baseline data</p> <p>1.2.6 Data Source: Departmental Records</p>	

Category 2 – Improved Health Outcomes & Quality

BMC Project 2.1: BMC Simulation and Nursing Education Center

(Master Plan Project 2.6: Establish a Multi Disciplinary Education and Simulation Center)

Goal: BMC is committed to continuous quality improvement. This DSTI project allows for the creation of a state-of-the-art, centralized simulation and education center for BMC's core community, including physicians, residents, students, nurses, pharmacists, allied health professions and potentially the community at large for certification courses. It will accommodate the needs of multiple departments including surgery, anesthesiology, nursing, pediatrics, medicine, and obstetrics/gynecology.

The BMC Simulation and Education Center is a transformational project as it trains multidisciplinary teams of individuals to provide the most efficient and safest care that is associated with the best outcomes, highest quality and lowest possible cost. Programs will utilize experiential, simulated scenarios and participatory courses to focus on effective communication, collaboration, crisis management and cultural competency.

Compared to standard process improvement and continuing education, simulation focuses on: 1) improving communication and technical skills among multi-disciplinary teams in the operating room and other procedural areas, 2) creating opportunities for doctors, nurses, and other staff to practice difficult or rare high risk scenarios, 3) providing certification and re-certification training for doctors, nurses, and other clinical staff, 4) offering additional practical experience in specialized areas for new physicians and nurses without jeopardizing patient safety, 5) lowering hospital liability risks and 6) serving as a resource to other local health providers and training programs, by providing access to training in the simulation center.

Practicing on mannequins provides a life-like training experience without the possibility of harming a live patient. Unlike standard techniques to improve safety and outcomes, simulation allows the provider to rehearse, rewind and practice without a negative patient outcome. Providers can demonstrate competence and be given adequate time to learn prior to entering the patient care arena. Critical to a non-fee for service model is allowing practitioners to develop deliberate practice techniques including intense repetition of skills to reassess their performance, gain feedback and demonstrate improved performance in a structured setting to avoid patient harm and prolonged hospital stays or delayed return to their normal activities. What is truly unique and transformational is teams all train together and learn the strengths of other practitioners to provide each patient with the right care at the right time. This initiative dovetails nicely for training of staff in the Project Red initiative and the Diabetes Referral Project and in preparing the staff for the medical home and ACO's by bringing all disciplines together in one consolidated location.

Rationale: Simulation training is a necessary training tool for hospitals worldwide. It is used to improve patient safety by providing opportunities for clinicians and staff to practice life-like medical scenarios using high technology equipment that simulates real-life emergency situations. This is possible through the use of high fidelity equipment, such as the Human Patient Simulator (HPS)—a mannequin that can simulate real breathing, drooling, speaking, and ejecting blood and fluids according to programmed emergency scenario. Multi-media software is intuitive; built to “react” to the actions and responses occurring in the room during the simulation. Residents and other trainees will utilize simulation to practice and develop a baseline competency prior to entering clinical arena.

Boston Medical Center (BMC) has a culturally diverse patient population with more than 70 percent racial and ethnic minorities. The staff is also diverse, making cultural competency and clear communication two key factors in delivering the exceptional care that is central to BMC’s mission. Simulation experiences are important ways for teams to develop effective communication techniques in a multicultural environment while also improving important medical skills or practicing emergency situations that are not common enough to remember well without regular practice. The BMC Simulation Center will differ from the other such resources in that it will be hospital supported and centralized for all disciplines. The curriculum will be aligned with hospital goals and will be required for designated staff to develop strategies for new and integrated multidisciplinary patient care.

Expected Results: BMC will develop and implement an innovative training center for clinical staff that will enhance the patient experience of care while improving the communication and procedural skills of multi-disciplinary teams. In year 1, space will be identified to house the training center and an outline of curriculum will be designed. In year 2, the training curriculum will be fully developed, a training schedule will be rolled out and the first 500 clinical staff will be trained. During year 2 teams training, crew resource management, trigger recognition and early rescue patient’s strategies will be rolled out with safety checklists. Communication drills will occur in the areas of apology, disclosure, interdisciplinary conflict, and cultural competency. In reference to tracking the effectiveness of simulation training and improvements in care, number of sessions attended will be tracked and maintained while tracking core measures, mortality data, leapfrog, NSQIP, UHC and other outcome measures including malpractice claims. Simulation will serve as a lever for cultural transformation to create a culture of safety to minimize readmissions and avoidable complications. In year 3, training will continue across multi-disciplinary teams at BMC with 1,000 clinical staff trained. In out years, after the Waiver 5 period, BMC will roll out training to all multi-disciplinary teams and will allow access and provide a resource to providers outside of the BMC system.

How the Project Can Refine Innovations, Test and Disseminate Findings: The BMC Simulation Center project is an innovative approach to training that focuses on the role of teams of practitioners who will treat the patient. Its multi cultural focus also will allow

for dissemination and use by safety net delivery systems across the country. In the traditional system providers are ingrained to function as respective individual experts taking responsibility, credit and blame by the individual's action. Overall teams training is important so practitioners can understand each other and this is not done in traditional training programs. As described above, the BMC Simulation and Education Center is a transformational project that trains multidisciplinary teams of individuals to provide the most efficient and safest care that is associated with the best outcomes, highest quality and lowest possible cost. The addition of the Programs will utilize experiential, simulated scenarios and participatory courses to focus on effective communication, collaboration, crisis management and cultural competency.

Relation to other Projects: Improved training is central for all of our projects that will transform the delivery of care. By focusing on the training of multi-disciplinary teams, BMC will further our efforts around the integration of the delivery system through Patient Centered Medical Homes and Accountable Care Organizations while also improving the quality of care for patients, a core component of the triple aim.

Project 2.1 – BMC Simulation and Nursing Education Center (Master Plan Project 2.6)		
SFY 2012	SFY 2013	SFY 2014
<p>2.1.1 Milestone: Identify and design space for creation of Sim Center.</p> <p>2.1.1 Metric(s): (1) (MP- P1) Documentation that space has been identified (2) (MP-P1) Documentation that the Center has been designed.</p> <p>2.1.1 Data Source: BMC internal records.</p> <p>2.1.2 Milestone: Creation of Sim Center clinical implementation workgroup to identify training programs to be offered and begin planning for implementation.</p> <p>2.1.2 Metric(s):</p>	<p>2.1.1 Milestone: Develop curriculum materials for initial Sim Center training program after a thorough review of the literature.</p> <p>2.1.1 Metric(s): (1) (MP-P 3) Copy of curriculum materials. (2) (MP-P 3) Summary review of the literature</p> <p>2.1.1 Data Source: BMC Sim Center Training Materials</p> <p>2.1.2 Milestone: Provide training to 500 clinical staff</p> <p>2.1.2 Metric(s):</p>	<p>2.1.1 Milestone: Develop materials for additional training teams.</p> <p>2.1.1 Metric: (1) (MP- P 4) Copy of additional training materials</p> <p>2.1.1 Data Source: BMC Sim Center Training Materials</p> <p>2.1.2 Milestone: Provide training to 1,000 clinical staff</p> <p>2.1.2 Metric: (2) (MP-I 1) Documentation of training to 1,000 clinical staff including pre and post skills assessments, where</p>

Project 2.1 – BMC Simulation and Nursing Education Center (Master Plan Project 2.6)		
SFY 2012	SFY 2013	SFY 2014
<p>(3) (MP-P 2) Provide list of Sim Center workgroup members and meeting agenda.</p> <p>(4) (MP-P 2) Provide outline of recommended list of Sim Center training programs for SFY 2013 and 2014.</p> <p>2.1.2 Data Source: Sim Center Training Summary.</p>	<p>(3) (MP-I 1) Documentation of training to 500 number of clinical staff, including pre- and post-skills assessments, where applicable.</p> <p>2.1.2 Data Source: BMC Sim Center Attendance records BMC data</p>	<p>applicable.</p> <p>2.1.2 Data Source: BMC Sim Center Attendance records</p>

Category 2 – Improved Health Outcomes & Quality:

BMC Project 2.2: Rapid Diabetes Referral/Follow up Project

(Master Plan Project 2.1: Implement Care Management Interventions for Patients with Chronic Diseases)

Goal: To coordinate care for patients with diabetes who present to the ED with diabetes-related symptoms or needs that do not require acute inpatient intervention. The short-term goal is to assess and connect the patient through a direct referral process to the Endocrinology clinic for diabetes management and education, thereby reducing unnecessary admissions and improving care coordination for this patient population. The long term goal is to ensure best/safe outcomes for this patient population, and to connect patients with additional medical and psychosocial resources that will reduce barriers to care and contribute to optimal overall health.

Rationale: Patients with diabetes face numerous challenges in managing their care, resulting in inappropriate visits to the ED. One identified factor contributing to unmanaged diabetes is difficulty maintaining regular follow-up with outpatient Endocrinology for diabetes management. In the past these patients were managed by admitting them to the hospital even when not medically warranted; however it has been determined that the priority needs for this population of patients are more often related to proper diabetic education and more consistent outpatient follow up/management (and not acute medical intervention in an inpatient setting). By engaging a multidisciplinary team, including Emergency Department physicians, nurses, and Care Managers as well as the outpatient Endocrinology clinic, we will create a system for identification and clinical handoff from the ED to the appropriate outpatient setting, thus improving patients' overall experience with dealing with chronic illness and satisfaction with their care.

Expected Results: This project will result in efficient and effective care for patients with diabetes who present to the ED with diabetes-related symptoms or needs that do not require acute inpatient intervention. For these patients, care in the appropriate setting will be provided by ensuring a direct referral to an appointment (within 24 hrs) with an endocrinologist following a visit to BMC ED for a non urgent medical matter. Barriers to timely outpatient follow-up will be identified and minimized, and additional unnecessary admissions to the hospital will be avoided.

In Year 1, BMC will set in place criteria for identifying patients with barriers to managing diabetes and a process for referring patients who seek diabetes related care in the Emergency Department to a more appropriate setting, if applicable. In Year 2, BMC will design and implement referral protocol for patients seeking non-urgent diabetes care in the ED including follow-up clinic appointments within 24 hours of the ED visit. Additionally, BMC will create a tracking system and follow the outcomes of patient referrals. We will also begin to identify most common barriers to patients for outpatient follow-up. Year 3 will continue the Diabetes Rapid Referral program efforts implemented designed in year 1 and implemented in year 2. We will also establish strategic partnerships with vendors, community agencies and others to expand quality of care across the continuum for this population.

How the Project Can Refine Innovations, Test and Disseminate Findings: Safety net delivery systems treat an even higher proportion of diabetic patients whose life situations make it more difficult for them to manage their care. BMC's DSTI project focuses on those diabetics whose lack of compliance often leads them to seek treatment at the Emergency Department with an historical inpatient admission following that visit. BMC believes that this innovative program can readily be adapted for use with high risk, high utilizing patients at hospitals across the country. BMC will internally disseminate findings from this project with various clinical and senior management groups and share results with appropriate community partners, as well. If appropriate, BMC may also share findings within its Learning Collaborative.

Relation to other Projects: Effective management of chronic disease is critical to succeeding under accountable payment models. Likewise effective identification of high-risk individuals with chronic disease is essential to effectively managing their care. The Rapid Diabetes Referral/Follow-up Project will serve as a model for other chronic disease management strategies. This will prepare BMC for the transition away from fee-for-service payment, and will build on the PCMH project by beginning to build a network and a series of processes that direct care within the BMC system. Clinical knowledge gained from this project will, in turn, be integrated into our Practice Support Center and Simulation Training and Education Center.

Project 2.2 – Rapid Diabetes Referral/Follow up Project (Master Plan Project 2.1)		
SFY 2012	SFY 2013	SFY 2014
<p>2.2.1 Milestone: Design and implement system for identifying patients with difficulty managing their diabetes, resulting in need for emergency care.</p> <p>2.2.2 1 Metric(s): (1) (MP-P 14) Documentation of parameters/criteria for identifying patients with barriers to managing diabetes</p> <p>2.2.1 Data source: Input from working group members BMC’s internal IBEX (ED) system</p> <p>2.2.2 Milestone: Identify staff involved in all aspects of diabetes care, education, and management</p> <p>2.2.2 Metric: (2) (MP-P 17) Copy of list of staff currently involved in care of targeted patients</p> <p>2.2.2 Data source: Minutes of Rapid Diabetes Referral working group meeting</p> <p>2.2.3 Milestone: Develop an internal working group with appropriate providers and leadership.</p> <p>2.2.3 Metrics: (3) (MP-14) Working group membership list and meeting schedule</p> <p>2.2.3 Data source: Minutes of Rapid Diabetes Referral working</p>	<p>2.2.1 Milestone: Design process to facilitate treatment and rapid referrals of patients with non-urgent diabetes management needs by developing and coordinating a referral system with BMC outpatient Endocrinology clinic which will result in referrals from the ED within 24 hours.</p> <p>2.2.1 Metric: (1) (MP-P 18) Documentation of referral process for patients seeking non-urgent diabetes care</p> <p>2.2.1 Data Source: Minutes of Rapid Diabetes Referral working group meeting BMC internal materials IBEX and Logician</p> <p>2.2.2 Milestone: Creation of tracking process measures which will include:</p> <ul style="list-style-type: none"> • # of identified preventable inpatient admissions for diabetes management, • # of patients participating in program, • % of follow-up appointments scheduled within 24 business hours, • # of no-shows <p>2.2.2 Metric(s): Copy of reports from Medical record logging/tracking system to demonstrate patient outcomes in the following areas:</p>	<p>2.2.1 Milestone: Review Year 1 and 2 data to identify additional needs of patients with diabetes to develop further strategies for care management.</p> <p>2.2.1 Metric(s): (1) (MP-P 16) Documentation of patient assessments and needs identified</p> <p>2.2.1 Data Source: IBEX and Logician Tracking/logging tools BMC internal communications</p> <p>2.2.2 Milestone: Creation of tracking process measures which will include:</p> <ul style="list-style-type: none"> • # of identified preventable inpatient admissions for diabetes management, • # of patients participating in program, • % of follow-up appointments scheduled within 24 business hours, • # of no-shows <p>2.2.2 Metric(s): Copy of reports from Medical record logging/tracking system to demonstrate patient outcomes in the following areas: (2) (MP-P 20) Documentation of medical record tracking system to follow outcomes of patient referrals (3) (MP-P 20) % follow-up appointment scheduling within 24 business hours</p>

Project 2.2 – Rapid Diabetes Referral/Follow up Project (Master Plan Project 2.1)		
SFY 2012	SFY 2013	SFY 2014
<p>group meeting</p> <p>2.2.4 Milestone: Identify common complications and develop tracking tool of the same that could directly relate to increased Emergency Department visits or uncontrolled Diabetes</p> <p>2.2.4 Metric: (4) (MP-P 15) Diabetic tracking tool as described above.</p> <p>2.2.4 Data Source Patient tracking tools Logician, EMR’s Feedback from working group</p> <p>2.2.5 Milestone: Engage community partners and assess for their ability to add additional resources to improve patient outcomes</p> <p>2.2.5 Metrics: (5) (MP-P 16) Documentation of meeting minutes with community partner(s)</p> <p>2.2.5 Data Source: Internal meeting minutes</p>	<p>(2) (MP-P 20) Documentation of medical record tracking system to follow outcomes of patient referrals</p> <p>(3)(MP-P 20) % follow-up appointment scheduling within 24 business hours</p> <p>2.2.2 Data Source: IBEX and Logician Tracking/logging tools</p> <p>2.2.3 Milestone: Use diabetic tracking tool developed in Year 1 to assess prevalence of diabetes complications and/or co-morbidities in patients presenting for evaluation at their first follow-up appointment.</p> <p>2.2.3 Metric: (4) (MP-I 13)Analysis of data captured by diabetic tracking tool</p> <p>2.2.3 Data Source Diabetic tracking tool IBEX, Logician.</p>	<p>2.2.2 Data Source: IBEX and Logician Tracking/logging tools</p> <p>2.2.3 Milestone Establish additional strategic partnerships with vendors, community agencies, and others to expand quality of care across the continuum.</p> <p>2.2.3 Metric(s): (4) (MP-P 16) Documentation of additional partners identified.</p> <p>2.2.3 Data Source: Minutes of Rapid Diabetes Referral working group meeting BMC internal communications</p> <p>2.2.4 Milestone: Educate and train ED staff about Diabetes Rapid Response and Follow-up protocols and medical record systems</p> <p>2.2.4 Metric(s): (5) (MP-P 12) Copy of training curriculum and materials with list of attendees from Emergency Department</p> <p>2.2.4 Data Source: IBEX and Logician Feedback from working group and all involved providers and patients</p> <p>2.2.5 Milestone: Expanding on identified complications and/or co-morbidities in Year 2 and</p>

Project 2.2 – Rapid Diabetes Referral/Follow up Project (Master Plan Project 2.1)		
SFY 2012	SFY 2013	SFY 2014
		<p>additional patient needs in Year 3, will measure the percentage of follow up care in the appropriate care settings, beginning with Outpatient Psychiatry, Podiatry and nephrology clinics.</p> <p>2.2.5 Metric(s): (6) (MP-I 14) Documentation of the % of follow-up care received in outpatient Psychiatry, Podiatry and Nephrology Clinics.</p> <p>2.2.5 Data Source: Diabetic tracking tool Logician, EMR Feedback from working group and all involved providers and patients</p>

Category 2 – Improved Health Outcomes & Quality

BMC Project 2.3: Re-engineered Discharge Process (Project RED) to Avoid Readmissions

(Master Plan Project 2.4: Develop or Expand Projects to Re-Engineer Discharge Processes)

Goal: BMC will implement a new discharge initiative called Project RED. This project is modeled after the successful research study piloted by BMC and the BU School of Medicine by Dr. Brian Jack. While the DSTI project is modeled after the successful research pilot, it is a unique and different effort than that pilot.

The DSTI Project RED will be implemented in two phases. The first will be a collaborative effort between BMC and its BMC HealthNet Plan to deliver the revamped “Re-Engineered Discharge (RED)” to adult medical BMCHP members admitted to Boston Medical Center. The second phase will expand this revamped Project RED to include adult medical patients hospitalized on BMC’s Family Medicine floor, regardless of insurer.

Project RED is a patient-centered program that standardizes and personalizes the complex hospital discharge process and is focused on reducing unnecessary re-admissions and Emergency Department visits within 30 days following hospital discharge. The implementation of Project Red is a significant effort to translate research developed programs into day to day hospital practice. While this DSTI Project RED is limited to adult patients, it will not have the many exclusions of the research pilot. The pilot randomized trial excluded patients who did not have a telephone, who did not speak English, who could not comprehend study details and the consent process. They did not enroll patients if they were admitted from a skilled nursing facility or other hospital, transferred to a different hospital service before enrollment, admitted for a planned hospitalization, were on hospital precautions or suicide watch, or were deaf or blind. None of these exclusions apply to our current program. In the research pilot, research assistants supported the nurses in their day to day work. Eliminating these exclusions and supports has significantly increased the challenge of implementing the program and achieving successful results, especially in a disadvantaged population. New learning has been and will continue to be required. Learning how to do this in a population without exclusions is a new challenge and is essential to achieving outcomes in a disadvantaged population.

Rationale: Decreasing readmissions is a national priority from both a cost and quality perspective. The ability to be successful in a post fee for service environment is dependent upon major strategies such as this that provide the best care for the patient and reduce unneeded readmissions. Project RED is addressing both of those arenas. Specifically, we expect that Project RED will improve (1) assessment of post-discharge needs; (2) patient/caregiver teaching/learning; (3) communication at discharge; and (4) contact post discharge. These efforts are particularly important when serving the predominantly low-income population served at BMC. Many of our patients do not speak English and have limited support services within the home to help them comply with post discharge planning. In addition, by ensuring that patients receive adequate information upon discharge and the required support post-discharge, quality of patient care and the overall patient experience will be enhanced.

Expected Results: BMC will implement the retooled Project RED in Year 1 with 500 adult BMC patients, ages 18 – 65, who are admitted for medical care (non-surgical and non-maternity) and are MassHealth or Commonwealth Care members of the BMC HealthNet Plan (BMCHP). Using the experience of the BMCHP patients in the first Year, BMC will expand Project RED by 60% to serve 800 patients in Year 2 by including hospitalized medical adult patients in BMCs Family Medicine medical floor. In Year 3, Project RED usage will expand again by 20%, bringing the total number of patients receiving re-engineered discharge to 996, by applying it to additional Family Medicine patients. Building upon experiences with the BMCHP and Family Medicine patients, BMC will also develop a hospital-wide plan to reduce avoidable readmissions for all of its patients and all payers. To further evaluate other parameters that potential could be influenced by this project, we will track and report on the post-30, 60 and 90 day emergency room (ER) visit for patient discharged through Project RED in years 2 and 3. Data related to readmissions for BMCHP adult medical patients will be based on claims data. Due to the three month lag nature of claims data and the required 30 day lag for readmission calculations, the baseline and subsequent reporting data will be for the period of July 1 through February 28 in each year.

In order to achieve success, the program relies on cooperation and consistent collaboration between the medical team, floor staff and the designated Discharge Nurse Educators (DNE's). DNE's will be onsite at BMC five days a week and in touch with physicians on a daily basis. The DNE's will begin discharge preparation with the patient and the medical team within twenty-four hours of admission and provide daily education through discharge. The DNE role include daily medication reconciliation, scheduling follow-up appointments, educating patients on their diagnosis and medications, providing community resources, and creating a written, personalized discharge plan.

This written discharge plan, an organized and reliable resource for patients is known as an After Hospital Care Plan, or AHCP. It is a bound calendar and is personalized for each patient. It can be adjusted for the patient's literacy level using pictures and words. Patients are encouraged to bring this book to each medical appointment after discharge. This key component of Project RED is presented to patients at discharge and provides:

- Scheduled follow up appointments with input from patients regarding times and dates that work best for them. The appointments are already made and confirmed with their PCP/Medical Home Provider.
- Discussion with the patient about the reason and importance of keeping all follow-up appointments for physicians, testing and other services
- Confirmation of the medication plan and medication instructions
- A review of appropriate steps for what to do if a problem exists include key telephone numbers to call:
 - PCP
 - Specialist
 - Emergency contact
 - Care Manager or DNE.

The AHCP will be faxed to the PCP and patients are asked to take it with them to follow-up appointments with all providers to ensure continuity of care. Patients will be called following discharge by a care manager, who will reinforce adherence to the hospital discharge plan. Referrals will be made for ongoing care management, behavioral health services or other needed services.

The re-engineered discharge process will also assess the degree of patient's understanding by asking them to assess the discharge plan in their own words. Through that assessment, BMC will be able to identify which patients require removal of language and literacy barriers by utilizing professional interpreters and which patients may require contacting family members to share in the care-giving responsibilities. Pharmacy staff is available to discuss complex medication issues.

How the Project Can Refine Innovations, Test and Disseminate Findings: The implementation of BMC's Project RED program with a focus on the safety net patients within BMC will allow us to assess the impact that this culturally sensitive, patient-focused program can have in reducing avoidable readmissions. This goal is one that will improve patient care as well as allow the health care delivery system to operate more effectively and, ultimately, at a lower cost. This project is ideally suited for dissemination across the large segment of safety net providers.

Relation to other Projects: Project RED is an integral part of BMC's efforts to contain costs and enable it to move to an alternative payment system. The Discharge Nurse Educators bridge the gaps between the hospital staff and the Patient Centered Medical Home to make sure the patient is returned to the medical home for follow-up and the primary care clinician has the AHCP and discharge note in a timely fashion so that continuity of care is assured. Patients who get timely visits with their primary care physician after discharge are less likely to be readmitted within 30 days of discharge. When these processes can be better embedded into the workflow of the floor staff, it will be transformational in bridging the inpatient and outpatient care of the patient and improving transitional care for every patient at BMC. It is tied to our strategic plan to move toward an at-risk, global payment model under an Accountable Care Organization and also tied to our patient-focused efforts such as the movement to Patient Centered Medical Homes.

As indicated earlier in the document, the BMC Project RED DSTI effort does not receive federal funding from HHS. As described in detail above, this project is a significant effort to translate the research pilot that has received NIH and AHRQ funding in the past, into day to day hospital practice.

Project 2.3 – Re-engineered Discharge Process (Project RED) to Avoid Readmissions (Master Plan Project 2.4)		
SFY 2012	SFY 2013	SFY 2014
<p>2.3.1 Milestone: Develop and staff Project RED for implementation with BMCHP adult medical patients hospitalized at BMC.</p> <p>2.3.1 Metric(s): (1) (MP-P 1) Project RED staffing plan (2) (MP-P 1) RED program description (3) (MP-P 1) Project RED patient criteria</p> <p>2.3.1 Data source: CMS Readmissions criteria BMCHP</p> <p>2.3.2 Milestone: Implement Re-engineered Discharge (RED) for 500 adult BMCHP members hospitalized at BMC annually.</p> <p>2.3.2 Metric(s): (4) (MP-P 2) Copy of BMCHP/BMC Implementation Plan (5) (MP-P 2) Copy of Report on # of patients participating in RED</p> <p>2.3.2 Data Source: BMCHP and BMC Records</p>	<p>2.3.1 Milestone: Design process to streamline and implement RED at BMC Family Medicine unit for adult medical patients across all payors. Redesign staffing component to reduce number of RED dedicated FTEs and to better integrate Red into the daily workflow of the inpatient unit.</p> <p>2.3.1 Metric: (1) (MP-P 4) Copy of RED redesigned process description (2) (MP-P 4) Copy of Family Medicine RED staffing plan</p> <p>2.3.1 Data Source: BMC Family Medicine records</p> <p>2.3.2 Milestone: Increase Project RED implementation by 60% (new total 800 patients/year) by implementing Project RED for BMCHP/BMC medical patients <u>and</u> all BMC’s Family Medicine unit from all payors.</p> <p>2.3.2 Metric(s): (3) (MP-I 1)Count of BMCHP/BMC patients receiving RED. (4) (MP-I 1)Count of Family Medicine Patients receiving RED</p> <p>2.3.2 Data Source: BMC internal records BMCHP records</p>	<p>2.3.1 Milestone: Increase Project RED implementation by additional 20% (new total 960 patients/year) for BMCHP/BMC patients and Family Medicine Unit patients</p> <p>2.3.1 Metric(s): (1) (MP-I 1) Count of BMCHP/BMC patients receiving RED. (2) (MP-I 1) Count of Family Medicine Patients receiving RED</p> <p>2.3.1 Data Source: BMC internal records BMCHP records</p> <p>2.3.2 Milestone: Using BMCHP claims data, report on BMCHP/BMC patient Project RED patients’ 30-day, all-cause readmissions rate compared to Year 1 and Year 2.</p> <p>2.3.2 Metric: (3) (MP-I 2) Copy of report comparing BMCHP/BMC 30-day, all-cause readmissions rate to Years 1 and 2.</p> <p>2.3.2 Date Source: BMCHP Records</p>

Project 2.3 – Re-engineered Discharge Process (Project RED) to Avoid Readmissions (Master Plan Project 2.4)		
SFY 2012	SFY 2013	SFY 2014
<p>2.3.3 Milestone: Through payor claims data, track readmission of BMCHP members hospitalized at BMC who received RED using CMS methodology for counting all cause readmissions at year end.</p> <p>2.3.3 Metric: (6) (MP-I 2) Copy of Report # of patients readmitted</p> <p>2.3.3 Data Source: CMS Criteria BMCHP/BMC data BMC data</p> <p>2.3.4 Milestone: Using BMCHP payer claims data, establish baseline data for 30-day, all-cause readmissions rate for BMCHP/BMC patients receiving RED.</p> <p>2.3.4 Metric: (7) (MP-P 3) Copy of baseline report</p> <p>Data Source: BMCHP/BMC data BMC data</p>	<p>2.3.3 Milestone: Using BMCHP claims data, report on BMCHP/BMC Project RED patient’s 30-day, all-cause readmissions rate compared to Year 1 baseline using CMS-defined all cause methodology.</p> <p>2.3.3 Metric: (5) (MP-I 2) Copy of report comparing 30-day all-cause readmissions rate in Year 2 to baseline.</p> <p>2.3.3 Data Source: BMCHP/BMC data</p> <p>2.3.4 Milestone: Track 30-day, all-cause readmissions rate to BMC for Family Medicine patients receiving RED</p> <p>2.3.4 Metric: (6) (MP-I 3) Copy of BMC 30-day, all-cause readmissions rate report for Family Medicine patients.</p> <p>2.3.4 Data Source: BMC internal records</p> <p>2.3.5 Milestone: Track and report on the post-30, 60 and 90 day emergency room (ER) visit for patients discharged through Project RED.</p> <p>2.3.5 Metric: (7) (MP-I 5) Copy of tracking report.</p> <p>2.3.5 Data Source: BMC Internal Records</p>	<p>2.3.3 Milestone: Track 30-day, all-cause readmissions rate to BMC for Family Medicine patients receiving RED</p> <p>2.3.3 Metric: (4) (MP-I 3) Copy of BMC 30-day, all-cause readmissions rate report for Family Medicine patients.</p> <p>2.3.3 Data Source: Internal BMC Data</p> <p>2.3.4 Milestone: Based on results of Project RED demos, recommend hospital-wide strategy to reduce avoidable readmissions.</p> <p>2.3.4 Metric: (5) (MP-P 6) Copy of Project RED cost benefit analysis (6) (MP-P 6) Copy of hospital wide readmissions policy report</p> <p>2.3.4 Data Source: Internal Hospital Information</p> <p>2.3.5 Milestone: Track and report on the post-30, 60 and 90 day emergency room (ER) visit for patients discharged through Project RED.</p> <p>2.3.5 Metric: (7) (MP-I 5) Copy of tracking report.</p> <p>2.3.5 Data Source: BMC Internal Records</p>

Category 3 – Ability to respond to statewide transformation to value-based purchasing and to accept alternatives to fee-for-service payments.

BMC Project 3.1: Develop expertise in preparation for transition to a risk-bearing Accountable Care Organization

(Master Plan Project 3.3: Develop Governance, Administrative, and Operational Capacities to Accept Global Payments/Alternative Payment)

Goal: Building upon our strong integrated network of care, the ultimate goal of the Boston Medical Center (BMC)/Boston HealthNet (BHN) integrated delivery system (the System) is to establish an accountable care organization (ACO) to coordinate all care for enrolled patients, accept and manage financial risk and increase the quality of care delivered to its patients as part of our five year vision. This DSTI project will allow the BMC system to lay the foundation for this effort through research on ACO requirements and readiness, defining the requirements necessary to undertake this transformation and putting the base structure in place toward the move to ultimately becoming an NCQA accredited Accountable Care Organization.

The underlying premise of the System's ACO model will be ensuring that our delivery system is accountable for putting the patient first in the provision of high quality, appropriate care at the right time, in the right setting and in a manner that is transparent to the patient, participating providers and payers. By effectively implementing the strategies of this project, the BMC/BHN system believes it can take important steps in our readiness to improve the quality of patient care while reducing the growing cost of care delivery in an ACO model.

The delivery system of the BMC/BHN ACO will initially include Boston Medical Center, 6 of the 15 affiliated community health centers of Boston HealthNet (BHN) and 22 BMC physician practice plans. Together, this System **serves an estimated 163,000 primary care patients** across all payers with the vast majority of patients covered by government payers. BMC HealthNet Plan (BMCHP) would be a key component of the ACO development structure with its managed care expertise in financial risk management, care management and data collection efforts.

Rationale: The System wholeheartedly embraces the vision encompassed within the Affordable Care Act (ACA), the Governor's delivery system reform legislation and Massachusetts Health Care Reform to ensure access and quality patient care delivered in the most cost-effective manner. As such, our ACO project will be shaped by the State's Payment Reform Legislation that is in development. Under this project, our system will set up the structure to further clinical, financial and administrative integration that will allow us within the next five years to be positioned to accept global payments for our primary care patients.

Expected Results: In Year One, BMC will create and convene a steering committee of senior leadership across the hospital, the BHN community health centers, and BMCHP to begin the process of moving toward an NCQA accredited ACO. Designated

subcommittees will be created in areas critical to the successful development of an ACO. In Year 2, we will hire ACO expertise to assess our readiness in achieving ACO status and prepare a recommended work plan toward formal development of an ACO including options for formal organization and legal structure, risk sharing strategies among the provider partners, and other required elements. We will also embark on ACO education and training for Leadership. In Year 3, BMC will begin to implement appropriate components of the work plan, as designed by our consultant, using the 7 components of the NCQA ACO accreditation model as a guideline, which will best lead BMC to becoming a high quality, risk-bearing ACO.

The BMC system is using the NCQA ACO accreditation process as the defining model under which to achieve ACO status. As part of our broader, five year strategy, BMC will seek to apply for NCQA accreditation as an accountable care organization. This will involve years of analysis, preparatory work and training to be successful in each of the required NCQA ACO domains. NCQA assesses ACOs against evidence-based criteria using measures to provide clarity to organizations about the key steps and components needed for successful transition. As such they can help to identify ACOs that have the infrastructure needed to achieve the “triple aim” of better experience, better health and lower cost.

Relation to other Projects: Taking the necessary operational steps to make an ACO viable is key to transitioning away from fee-for-service reimbursement and preparing to accept global payment arrangements. Yet, to succeed under a risk-bearing ACO model, we must also have the care processes and support systems in place to deliver quality, cost-efficient care to all of our enrollees. As such, the additional projects outlined in this proposal lay the groundwork for the type of care delivery necessary to succeed under accountable care organizational and payment models. In its ACO accreditation summary, NCQA notes that its program builds on, and incorporates, successful elements of Patient Centered Medical Homes recognizing that excellent primary care is the foundation of good health care.

BMC’s ACO project is directly linked to each of our additional DSTI efforts. PCMH’s are the foundation upon which ACOs are built while our Practice Support Center, Diabetes Rapid Referral Program, and Simulation and Education Center will ensure high quality and efficient care for as we develop ACO capabilities. Finally, an effective ACO requires that our care management systems are designed in such a manner to reduce unnecessary readmissions, the central focus of BMC’s Project RED.

Project 3.1: Develop expertise in preparation for transition to a risk-bearing Accountable Care Organization (Master Plan Project 3.3)		
SFY 2012	SFY 2013	SFY 2014
<p>3.1.1 Milestone: Create an ACO steering committee of BMC, BHN CHC and BMCHP senior leadership to share information and begin the process for planning a move toward ACO. Also, create subcommittees focused on Finance, Clinical, Quality and Information Technology.</p> <p>3.1.1 Metric(s): (1) (MP-P 12) List of steering committee and subcommittee membership (2) (MP-P 12) Copies of steering committee and subcommittee meeting agendas (3) (MP-P 12) Documentation of attendance at ACO trainings/conferences</p> <p>3.1.1 Data Source: BMC Internal Data</p> <p>3.1.2 Milestone: Determine estimated number of primary care patients, by payer, at BMC and each participating BHN CHC site.</p> <p>3.1.2 Metric: (4) (MP-P 13) Copy of primary care patient report</p> <p>3.1.2 Data Source: BMC Internal Data, CHC Data, BMCHP Data</p> <p>3.1.3 Milestone:</p>	<p>3.1.1 Milestone: Hire a consultant to assess ACO development needs.</p> <p>3.1.1 Metric(s): (1) (MP-P 15) Documentation of consultant hired (2) (MP-P 15) Copy of consultant scope of work</p> <p>3.1.1 Data Source: Internal Documents</p> <p>3.1.2 Milestone: Production of an ACO development report by consultant and internal timeline for future ACO activity</p> <p>3.1.2 Metric(s): (3) (MP-P 18) Copy of consultant’s report to address BMC system’s readiness to achieve NCQA ACO Accreditation Standards:</p> <ul style="list-style-type: none"> – ACO Structure and Operations – Access to Needed Providers – Patient-Centered Primary Care – Care Management – Care Coordination and Transitions – Patient Rights and Responsibilities – Performance Reporting & Quality Improvement <p>(4) (MP-P 18) Copy of implementation timeline</p>	<p>3.1.1 Milestone: Steering Committee & Board review and approval of appropriate components of ACO consultant report.</p> <p>3.1.1 Metric(s): (1) (MP-P 20) Copy of Steering Committee recommendation (2) (MP-P 20) Copy of Board vote</p> <p>3.1.1 Data Source: BMC Internal Documents</p> <p>3.1.2 Milestone: Begin implementation of approved steps to move toward NCQA ACO accreditation from consultant’s report.</p> <p>3.1.2 Metric(s): (3) (MP-I 4) Schedule of implementation (4) (MP-I 4) Documentation of implementation</p> <p>3.1.2 Data Source: BMC Internal Documents</p> <p>3.1.3 Milestone: Participation in ACO educational sessions (e.g. NCQA, Brooking/Dartmouth)</p> <p>3.1.3 Metric: (5) (MP-P 19) Documentation of attendance at ACO educational sessions</p> <p>3.1.3 Data Source:</p>

Project 3.1: Develop expertise in preparation for transition to a risk-bearing Accountable Care Organization (Master Plan Project 3.3)		
SFY 2012	SFY 2013	SFY 2014
Prepare ACO concept paper Metric: (5) (MP-P 14) Copy of ACO concept paper Data Source: BMC internal data, CHC Data	3.1.2 Data Source: <ul style="list-style-type: none"> BMC internal documents 3.1.3 Milestone: Leadership participation in ACO education sessions and other applicable ACO information sessions (e.g. NCQA & Brookings/Dartmouth) 3.1.3 Metric: (5) (MP-P 19) Documentation of attendance at ACO education and informational sessions 3.1.3 Data Source: BMC and vendor data	BMC and vendor data

Category 3 – Ability to respond to statewide transformation to value-based purchasing and to accept alternatives to fee-for-service payments.

BMC Project 3.2: Learning Collaborative

(Master Plan Project 3.9: Participate in a Learning Collaborative)

Goal: Collectively, the DSTI projects proposed in Categories 1, 2 and 3 of this plan have the potential to significantly transform the care experience for Massachusetts residents served by eligible safety net hospitals. As important as individual hospital efforts will be, there is even greater potential value in leveraging the hospitals' efforts for delivery system transformation through the sharing of best practices.

Rationale: Participation in a learning collaborative will provide a forum for eligible DSTI safety net providers to learn from other providers that share similar goals and to capitalize on potential synergies in their efforts. Through this project, Boston Medical Center will join an existing learning collaborative – such as the Brookings-Dartmouth ACO Learning Network or another ongoing learning collaborative that aligns with DSTI goals – or will develop a new learning collaborative designed to support its transformation goals.

Expected Results:

- A. Explore existing and/or potential new opportunities for participation in a learning collaborative whose goals align with the Triple Aim and DSTI transformation objectives.
 - B. Select a learning collaborative in which to participate, which may consist of either:
 - 1. Identifying and joining an existing learning collaborative whose goals align with the Triple Aim and DSTI objectives; OR
 - 2. Developing a new learning collaborative structure designed to support the hospital's delivery system transformation goals and to align with the Triple Aim and DSTI objectives.⁴
 - C. In the case that a hospital elects to develop a new learning collaborative, establish and implement a new learning collaborative designed to support the hospital's delivery system transformation goals under DSTI and to align with the Triple Aim and DSTI objectives.
 - D. Participate actively in the selected or new learning collaborative.
- Report on lessons learned from participation in a learning collaborative as they relate to the hospital's delivery system transformation goals under DSTI.

⁴ BMC is assessing the two options for participation in a Learning Collaborative in Year 1. With the information gained in Year 1, we will make an informed decision on whether to join an existing Learning Collaborative or develop a new Learning Collaborative by August 31st of Year 2.

Relation to Other Projects: The learning collaborative model supports the development of a shared culture of continuous improvement and innovation, which will facilitate and enhance the individual hospitals' efforts to advance the Triple Aim through their DSTI projects.

Project 3.2: Participate in a Learning Collaborative (Master Plan Project 3.9)		
SFY 2012	SFY 2013	SFY 2014
<p>3.2.1 Milestone: Explore existing and/or potential new opportunities for participation in learning collaborative.</p> <p>3.2.1 Metric: (1) (MP- P 1) Hospital meeting minutes and/or documentation of research findings on learning collaboratives.</p> <p>3.2.1 Data Source Internal hospital documentation</p>	<p>3.2.1 Milestone: Participate actively in learning collaborative.</p> <p>3.2.1 Metric: (1) (MP-P 5) Documentation of attendance at and/or participation in learning collaborative activities.</p> <p>3.2.1 Data Source(s): Internal hospital documentation and/or learning collaborative documents</p> <p><u>Choice of one of the following options for Project Element B (select a learning collaborative in which to participate):</u>⁵</p> <p><u>Option 1 of Project Element B:</u></p> <p>3.2.2 Milestone: Select and join an existing learning collaborative (if selecting option 1 of Project Element B).</p> <p>3.2.2 Metric: (2) (MP-P 2) Documentation of hospital joining learning collaborative.</p> <p>3.2.2 Data Source</p>	<p>3.2.1 Milestone: Participate actively in learning collaborative.</p> <p>3.2.1 Metric: (1) (MP-P 5) Documentation of attendance at and/or participation in learning collaborative activities.</p> <p>3.2.1 Data Sources(s): Internal hospital documentation and/or learning collaborative documents</p> <p>3.2.2 Milestone: Report on lessons learned from participation in learning collaborative as they relate to the hospital's delivery system transformation goals under DSTI.</p> <p>3.2.2 Metric: (2) (MP-P 6) Hospital report on lessons learned.</p>

⁵ BMC is assessing the two options for participation in a Learning Collaborative in Year 1. With the information gained in Year 1, we will make an informed decision on whether to join an existing Learning Collaborative or develop a new Learning Collaborative by August 31st of Year 2.

Project 3.2: Participate in a Learning Collaborative (Master Plan Project 3.9)		
SFY 2012	SFY 2013	SFY 2014
	<p>Internal hospital documentation and/or learning collaborative documents</p> <p>OR:</p> <p><u>Option 2 of Project Element B:</u></p> <p>3.2.2 Milestone: Develop a new learning collaborative structure (if selecting option 2 of Project Element B).</p> <p>3.2.2 Metric: (2) (MP-P 3) Documentation of new learning collaborative goals, structure and membership and/or signed agreement with facilitator of new learning collaborative (if applicable).</p> <p>3.2.2 Data Source(s): Learning collaborative documents and/or agreement</p>	<p>3.2.2 Data Source: Hospital report</p>

Category 4 – Population Focused Improvements

Pursuant to Section X of Attachment J to the Massachusetts Section 1115 Demonstration Special Terms and Conditions, the purpose of Category 4 is to evaluate the impact of the investments and system changes described in Categories 1, 2 and 3 through population-focused measures. Category 4 metrics recognize that the population-focused objectives do not guarantee outcomes but result in learning, adaptation, and progress. As such, eligible safety net hospitals will measure and report on selected measures but will not have milestones associated with the achievement of specific improvements. Hospitals shall commence reporting Category 4 measures starting in Demonstration Year 16 (SFY 2013).

Common Measures

All participating safety net hospitals will develop plans to report on a core set of Category 4 measures pursuant to Table 1 of Section X.D of Attachment J. Hospitals shall report on 11 Common Measures in Demonstration Year 16 (SFY 2013) and report on one additional Common Measure in Demonstration Year 17 (SFY 2014), for a total of 12 Common Measures in Demonstration Year 17. Because this category involves evaluating the initiatives and system changes described in Categories 1, 2, and 3 through population-focused objectives, the common measure set is organized around the Triple Aim:

Better Care: Improve the overall quality of the US health system by making health care more patient-centered, reliable, accessible, and safe. These goals, set forward by the Institute of Medicine in “Crossing the Quality Chasm,” are important domains for assessing the effectiveness of care improvements. In the context of the DSTI program, there is a focus on both the quality and experience of patient care.

One area of increasing national attention has been a focus on improvement of care transitions between providers or settings of care. Health care transitions, such as moves in and out of hospitals to post-acute care/nursing home care, home care (with and without home care supports), or outpatient care have been shown to be prone to medical errors; poor care coordination, infections and incorrect usage of medications—leading to potentially avoidable hospital readmissions, less than optimal patient health outcomes, and added health care costs. This is especially the case for complex care needs, patients with social acuity, and co-occurring health conditions.

Given the importance of examining patient care transitions and their effect on patient outcomes, three Common Measures, utilizing patient experience of care measures from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey focus on whether patients’ felt they had a good understanding of their medications and care needs post-discharge. Medication

adherence and errors are a leading source of unnecessary emergency and acute care; therefore, it is an area of shared focus.⁶ Included within the HCAHPS measures is the Three-Item Care Transition Measure (CTM-3). This measure set has recently been added as a voluntary option to the HCAHPS survey.

Better Care also includes a focus on care in Emergency Departments. Reducing the time patients remain in the emergency department (ED) can improve access to treatment and increase quality of care. Reducing this time potentially improves access to care specific to the patient condition and increases the capability to provide additional treatment. Overcrowding and heavy emergency resource demand have led to a number of problems, including prolonged patient waiting times, increased suffering for those who wait, rushed and unpleasant treatment environments, and potentially poor patient outcomes.

Better Care Common Measures	DY 16 Measurement Period	DY 16 Reporting Date(s) to EOHHS	DY 17 Measurement Period	DY 17 Reporting Date(s) to EOHHS
4.1 Care Transitions Measure Set (CTM-3) Voluntary HCAHPS questions Data Source: Hospital vendor or Hospital Compare as available	Not applicable in DY16. Requires new data capture.	Not applicable in DY16. Requires new data capture.	07/01/12 – 06/30/13	7/31/14
4.2: Patients who reported that staff "Always" explained about medicines before giving it to them. HCAHPS Composite (Questions 16 & 17) Data Source: Hospital Compare	01/01/11 – 12/31/11	1/31/13	01/01/12 – 12/31/12	1/31/14
4.3: Patients at each hospital who reported that YES, they were given information about what to do during their recovery at home. HCAHPS Composite (Questions 19 & 20) Data Source: Hospital Compare	01/01/11 – 12/31/11	1/31/13	01/01/12 – 12/31/12	1/31/14

⁶ Forster AJ, Murff HJ, et al. "The Incidence and Severity of Adverse Events Affecting Patients after Discharge from the Hospital." *Ann Intern Med.* (2003) 138:161-167.

Better Care Common Measures	DY 16 Measurement Period	DY 16 Reporting Date(s) to EOHHS	DY 17 Measurement Period	DY 17 Reporting Date(s) to EOHHS
4.4: ED Wait Time: Door to Diagnostic Evaluation by a Qualified Medical Personnel CMS IQR measure (OP-20) Data Source: Hospital Compare	01/1/2012 - 06/30/12	1/31/13	07/1/2012 - 06/30/13	1/31/14

Better Health: Improve the health of the population by supporting proven interventions and enhancing the quality of care delivered. Many of today’s individual health care processes are designed to respond to the acute needs of individual patients, rather than to anticipate and shape patterns of care for important subgroups. Population health focuses on segmenting the population, perhaps according to health status, level of support from family or others, and socioeconomic status, to facilitate efficient and appropriate care delivery. The Category 4 common measures share a focus on examining population dynamics. Two CMS Inpatient Quality Reporting/Joint Commission measures report on proven immunization interventions that can improve the health of hospitalized populations following discharge—preventing subsequent care interventions.⁷ Two other ambulatory- sensitive measures examine acute admissions for chronic obstructive pulmonary disease (COPD) and congestive heart failure (CHF) patients—two patient populations of particular concern given their chronic care needs. A fifth measure looks at maternal and child health—examining the incidence of low-birth weight children, a leading determinant of newborn health especially important for Medicaid populations.

⁷ See Specifications Manual for National Hospital Inpatient Quality Measures for selected references on clinical effectiveness of immunizations. Available at <http://www.qualitynet.org>

Better Health Common Measures	DY 16 Measurement Period	DY 16 Reporting Date(s) to EOHHS	DY 17 Measurement Period	DY 17 Reporting Date(s) to EOHHS
4.5: Pneumonia Immunization <i>CMS IQR/Joint Commission measure IMM-1a⁸</i> <i>Data Source: Hospital Compare</i>	01/01/12 – 06/30/12	01/31/13	07/01/12 – 06/30/13	01/31/14
4.6: Influenza Immunization (seasonal measure) <i>CMS IQR/Joint Commission measure IMM-2⁹</i> <i>Data Source: Hospital Compare</i>	01/01/12 - 03/30/12	01/31/13	10/01/12-03/30/13	01/31/14
4.7: Percent of discharged patients under age 75 who were hospitalized for Chronic Obstructive Pulmonary Disease (Ambulatory Sensitive-Condition Admissions Measure) <i>Modified AHRQ PQI-5; denominator modified to include only discharged hospital inpatients</i> <i>Data Source: Hospital billing data</i>	10/01/11 – 9/30/12	01/31/13	10/01/12 – 09/30/13	01/31/14
4.8: Percent of discharged patients under age 75 who were hospitalized for Congestive Heart Failure (Ambulatory Sensitive-Condition Admissions Measure) <i>Modified AHRQ PQI-8; denominator modified to include only discharged hospital inpatients</i> <i>Data Source: Hospital billing data</i>	10/01/11 – 9/30/12	01/31/13	10/01/12 – 09/30/13	01/31/14
4.9: Low Birth Weight Rate: number of low birth weight infants per 100 births ¹⁰ <i>AHRQ PQI-9</i> <i>Data Source: Hospital records</i>	10/01/11 – 9/30/12	01/31/13	10/01/12 – 09/30/13	01/31/14

⁸ CMS and the Joint Commission began collecting this measure effective with January 1, 2012 discharges. IMM-1a includes all inpatients.

⁹ CMS and the Joint Commission began collecting this measure effective with January 1, 2012 discharges. IMM-2 includes all inpatients.

¹⁰ Hospitals without maternity services are exempted from this measure.

Cost-Effective Care: Improve cost-effectiveness of care through improved care delivery for individuals, families, employers, and the government. Measures that provide insights both into improved opportunities for health care delivery and health care cost-effectiveness are an area of particular focus in the Triple Aim. Many of the DSTI Category 1-3 projects include a specific focus on improving population health outside of the walls of the hospital (e.g. Primary Care Medical Homes, Health Information Exchanges, ACO development, etc.); therefore, it will be important to examine measures within the Category 4 Common Measures that look at hospital care indicators that are ambulatory-sensitive and that have the potential for better care coordination or care venues. Preventable readmissions are an area of nationwide focus, both for their cost and health implications, but also because many readmissions are the result of poor care hand-offs and lack of care coordination post discharge. Similarly, many pediatric asthma emergency department visits are potentially avoidable with concerted outpatient management and care plans; therefore, an ambulatory-care sensitive pediatric asthma measure, relevant to Medicaid populations, has been included. Lastly, a measure of early elective delivery examines a practice of care for which the evidence-base suggests can lead to unnecessary newborn complications and health care costs.¹¹

Cost-Effective Care Common Measures	DY 16 Measurement Period	DY 16 Reporting Date(s) to EOHHS	DY 17 Measurement Period	DY 17 Reporting Date(s) to EOHHS
4.10: Hospital 30-day, all-cause readmission rate to the index hospital following a hospitalization for all patients 18 and older (not risk adjusted) <i>See CMS IQR Readmissions Measures (AMI, CHF, and Pneumonia) for a list of standard exclusions, including: 1) index admissions for patients with an in-hospital death, 2) patients transferred from the index facility to another acute care facility, and 3) patients discharged against medical advice.¹²</i> <i>Data Source: Hospital billing data</i>	10/01/11 – 9/30/12	01/31/13	10/01/12 – 09/30/13	01/31/14

¹¹ Clark, S., Miller, D., Belfort, M., Dildy, G., Frye, D., & Meyers, J. (2009). Neonatal and maternal outcomes associated with elective delivery. [Electronic Version]. *Am J Obstet Gynecol.* 200:156.e1-156.e4.

¹² In addition, if a patient has one or more admissions within 30 days of discharge from the index admission, only one is counted as a readmission. No admissions within 30 days of discharge from an index admission are considered as additional index admissions. The next eligible admission after the 30-day time period following an index admission will be considered another index admission.

Cost-Effective Care Common Measures	DY 16 Measurement Period	DY 16 Reporting Date(s) to EOHS	DY 17 Measurement Period	DY 17 Reporting Date(s) to EOHS
4.11: Percent of Emergency Department visits for children age 18 or less with a primary diagnosis of asthma--Ambulatory Sensitive-Condition <i>See AHRQ PDI-14 for numerator specification. Denominator specification includes children ages 2 to 17 with an ED visit</i> <i>Data Source: Hospital ED billing data</i>	10/01/11 – 9/30/12	01/31/13	10/01/12 – 09/30/13	01/31/14
4.12: Percent of patients with elective vaginal deliveries or elective cesarean sections at greater than or equal to 37 weeks and less than 39 weeks of gestation completed ¹³ <i>MassHealth Maternity Measure-3</i> <i>Data Source: MassHealth Quality Exchange(MassQEX)</i>	07/01/11-06/30/12	1/31/13	07/01/12-06/30/13	1/31/14

Hospital-Specific Measures

In addition to the common measures listed in above, hospitals must select hospital-specific measures on which to report according to the projects they have selected in Categories 1-3. Hospitals must select for reporting in Category 4 a minimum of one measure per project up to a total of 15 Category 4 hospital-specific measures for projects selected in Categories 1-3. Project 3.9: Participate in a Learning Collaborative will not have associated Category 4 hospital-specific measures. Hospitals shall choose from the options listed in the Master DSTI Plan, which are associated with the project in Categories 1-3 to which they pertain.¹⁴

Boston Medical Center-specific measures

BMC will report on the following list of hospital specific population focused quality measures linked to each of our DSTI projects.

¹³ Hospitals without maternity services are exempted from this measure.

¹⁴ Hospitals must ensure that sampling procedures consistently produce statistically valid and useful data. If a hospital's denominator population for a given measure is not sufficiently large to produce statistically valid data, then hospitals shall not be required to report the data under Category 4 measures.

Project 1.1 Patient Centered Medical Home. The aim of the Patient-Centered Medical Home (PCMH) is to provide comprehensive primary care for patients over time. Even though this seems a simple aim, the act of providing care in terms of treating populations that organizes care around patients rather than traditional point of care approach is complex. In recognition of this complexity, BMC is dedicated to taking the path of certification as a PCMH through NCQA.

Among the several underpinnings of both the certification and (more over) the PCMH model is sustaining and building the relationship between the patient and the primary care clinician. Another important aspect is to view the care of the patient over time through preventive care. Direct monitoring of the relationship between the patient and primary care clinician can be implemented through the utilization of overall patient satisfaction surveys and litmus for providing care over the life of the patient can be the utilization of population based process measures.

Understanding the importance of these two underpinnings, BMC is dedicated to monitoring the relationship between the patient and provider by reporting the overall rating score on the Press Ganey Medical Practice Survey for two medical practices. This patient experience is composite metric based on access to care, visit experience, care from the provider, personal issues, and overall assessment.

Patient Centered Medical Home is using standardized medical practice patient experience metrics developed by Press Ganey, which are not NQF sponsored.

Project 1.2 Practice Support Center. The Practice Support Center project is designed to support General Internal Medicine primary care practice, improve patient experience, and provide support to physicians in such that the administrative burden that is routine to a visit is minimized. Unlike a tradition call center approach, the center goes beyond scheduling; the aim of this center is to provide linkage to resources through care coordination and access to practice care assistants to manage pre and post visit requirements. Determination of success for this can be divided into three specific metric domains: (1) communication; (2) access; and (3) ensuring continuum of care by proactively looking at preventive measures that the patient needs (rather than reactively scheduling an appointment requested by the patient).

For these domains, BMC has selected the following metric For access, the selected metric is the percent of patients answering good or very good for ease of scheduling appointments. It is a standardized metric from Press Ganey but not NQF sponsored.

Project 2.1 Establish a Multi-Disciplinary Education and Simulation Center. The establishment of a multi-disciplinary education and simulation center provides a safe control environment that trains multidisciplinary teams of individuals to provide the most efficient and safest care. This is an innovative center that provides the space to implement, test, and teach best practices.

Two metrics were selected for this project. Due to the lack of many metrics that are directly influenced by the curriculum of simulation training, a customized metric and a standard metric were selected. The first metric, the percent of infants delivered vaginally with shoulder dystocia, is a customized metric. It was selected because it is specific to teaching and training of the obstetric domain. The second metric is the failure to rescue rate (AHRQ PSI 39), a standardized metric. This metric was selected because it is one of the most expansive patient safety metrics that has the potential to be impacted by this project.

Project 2.2 Rapid Diabetes Referral and Follow-Up. BMC has selected two measures related to this project. One is a nationally accepted, standardized metric tracking the percent of patients 18 – 75 years of age with diabetes who received one or more A1c test(s) per year (NQF 0057). This process measure was selected because it is a proxy for regular follow-up with outpatient Endocrinology for diabetes management, which is a standard of care. The engagement of the previously mentioned multidisciplinary team and the Endocrinology clinic, which is encapsulated by this project, will create a system of identification and clinical handoff from ED to the appropriate outpatient setting. This should lead to a shift from reactive interventions to proactive management of diabetes. Therefore as these interventions increase, appropriate management (as captured by the above metric) should increase.

Additionally, BMC has selected a custom outcome metric that relates to implementation of care management interventions for patients with chronic diseases. Repeat ED visit rate is believed to be a proxy for this project. As care management interventions for patients with chronic diseases increase, the percent of repeat ED visit rate is expected to decrease.

Project 2.3 Develop or Expand Projects to re-Engineer Discharge Process (Project RED). The focus of BMC's Project RED DSTI initiative is to decrease readmission rates. These patients are adults (18-65 years old), admitted for medical care (non-surgical and non-maternity) and are MassHealth or Commonwealth Care members of the BMC HealthNet Plan or a specific family medicine unit. To meet this end, BMC has selected one process metric specific to this population. This customized process measure is the percent of all BMC patients enrolled in Project RED who received a hospital after care plan at discharge. The purpose of this measure is to capture data on an intervention that influences readmissions. Appropriate dissemination and understanding of a hospital after care plan has the potential to decreasing readmissions by setting the stage for the next appropriate level of care.

Project 3.1 Develop expertise in preparation for transition to a risk-bearing Accountable Care Organization. Three nationally recognized metrics were selected because the impact of these process measures is felt through the continuum of care. These metrics are within three different chronic diseases, asthma, heart failure, and diabetes. All three are standardized measures. In asthma,

management of asthma through medication impacts both the inpatient and outpatient. This specific metric is the percentage of patients who were identified as having persistent asthma and who were dispensed a prescription for either an inhaled corticosteroid or acceptable alternative medication during the measurement year (NQF 0036). Similarly, the heart failure metric that was selected was the percentage of patients aged greater than or equal to 18 years with diagnosed heart failure (HF) who also have left ventricular systolic dysfunction (LVSD) who were prescribed angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (NQMC-1976). In diabetes, a metric related to poor diabetic control was selected. Specifically, this metric aims to capture the percentage of members 18 through 75 years of age with diabetes mellitus (type 1 and type 2) whose most recent hemoglobin A1c (HbA1c) level is greater than 9.0% (poorly controlled) (NQMC-6217).

Category	BMC Project #	BMC DSTI Projects (Master Plan Category)	ID	Measure
1	1.1	Patient Centered Medical Home (PCMH)	Press Ganey	Medical practice satisfaction: overall rating score on Medical Practice Survey for two large medical practices
1	1.2	Practice Support Center (Practice Support Center)	Press Ganey	Medical practice satisfaction: percent of patients answering good or very good for ease of scheduling appointments for GIM primary care practice.
2	2.1	BMC Simulation & Nursing Center (Establish a Multi Disciplinary Education and Simulation Center)	Customized Measure	Percent of infants delivered vaginally with shoulder dystocia.
2	2.1	BMC Simulation & Nursing Center (Establish a Multi Disciplinary Education and Simulation Center)	AHRQ PSI 39	Failure to Rescue Rate: Deaths per 1,000 patients having developed specified complications of care during hospitalization.

2	2.2	Rapid Diabetes Referral and Follow-Up (Implement Care Management Interventions for Patients with Chronic Diseases)	NQF 0057	Percent of patients 18-75 of age with diabetes who received one or more A1c test(s) per year
2	2.2	Rapid Diabetes Referral and Follow-Up (Implement Care Management Interventions for Patients with Chronic Diseases)	Customized Measure	Repeat ED visit rate
2	2.3	Project RED (Develop or Expand Projects to re-Engineer Discharge Processes)	Customized Measure	Percent of parents or caregivers of patients enrolled in Project RED ages 18 – 65, admitted for medical care (non-surgical and non-maternity) to a specific cohort, who receive a hospital after care plan at discharge
3	3.1	ACO Development (Develop Governance, Administrative, and Operational Capacities to Accept Global Payments/Alternative Payments)	NQF 0036	Percentage of patients who were identified as having persistent asthma and who were dispensed a prescription for either an inhaled corticosteroid or acceptable alternative medication during the measurement year
3	3.1	ACO Development (Develop Governance, Administrative, and Operational Capacities to Accept Global Payments/Alternative Payments)	NQMC-1976	Heart failure: percentage of patients aged greater than or equal to 18 years with diagnosed heart failure (HF) who also have left ventricular systolic dysfunction (LVSD) who were prescribed angiotensin-converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy.

3	3.1	ACO Development (Develop Governance, Administrative, and Operational Capacities to Accept Global Payments/Alternative Payments)	NQMC-6217	Comprehensive diabetes care: percentage of members 18 through 75 years of age with diabetes mellitus (type 1 and type 2) whose most recent hemoglobin A1c (HbA1c) level is greater than 9.0% (poorly controlled).
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Appendix A
Metric Funding Allocation Table

Hospital Name: Boston Medical Center
DSTI Proportional Allotment Factor: 0.49468152866242

DY 15/SFY12			DY 16/SFY13			DY 17/SFY14		
Cat 1: Integration			Cat 1: Integration			Cat 1: Integration		
Annual Metric Base Value		\$3,349,333	Annual Metric Base Value		\$5,024,000	Annual Metric Base Value		\$5,024,000
Metric Base Value Adjusted for Proportional Allotment Factor		\$1,656,853	Metric Base Value Adjusted for Proportional Allotment Factor		\$2,485,280	Metric Base Value Adjusted for Proportional Allotment Factor		\$2,485,280
Project/ Metric	Optional Adjust- ment (%)	Metric Value	Project/ Metric	Optional Adjust- ment (%)	Metric Value	Project/ Metric	Optional Adjust- ment (%)	Metric Value
Project 1.1 Patient Centered Medical Home			Project 1.1 Patient Centered Medical Home			Project 1.1 Patient Centered Medical Home		
Metric Base Value Adjusted for # Metrics		1.00000	Metric Base Value Adjusted for # Metrics		0.714285714285714	Metric Base Value Adjusted for # Metrics		0.833333333333333
Metric	1	\$1,656,853	Metric	1	\$1,775,200	Metric	1	\$2,071,067
Metric	2	\$1,656,853	Metric	2	\$1,775,200	Metric	2	\$2,071,067
Metric	3	\$1,656,853	Metric	3	\$1,775,200	Metric	3	\$2,071,067
Metric	4	\$1,656,853	Metric	4	\$1,775,200	Metric	4	\$2,071,067
Metric	5	\$1,656,853	Metric	5	\$1,775,200	Metric	5	\$2,071,067
			Metric	6	\$1,775,200	Metric	6	\$2,071,067
			Metric	7	\$1,775,200			
Project Subtotal		\$8,284,267	Project Subtotal		\$12,426,400	Project Subtotal		\$12,426,400
Project 1.2 Practice Support Center			Project 1.2 Practice Support Center			Project 1.2 Practice Support Center		

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Metric Base Value Adjusted for # Metrics		.62500	Metric Base Value Adjusted for # Metrics		0.8333333333 3333	Metric Base Value Adjusted for # Metrics		1.00000
Metric	1	\$1,035,533	Metric	1	\$ 2,071,067	Metric	1	\$2,485,280
Metric	2	\$1,035,533	Metric	2	\$2,071,067	Metric	2	\$2,485,280
Metric	3	\$1,035,533	Metric	3	\$2,071,067	Metric	3	\$2,485,280
Metric	4	\$1,035,533	Metric	4	\$2,071,067	Metric	4	\$2,485,280
Metric	5	\$1,035,533	Metric	5	\$ 2,071,067	Metric	5	\$2,485,280
Metric	6	\$1,035,533	Metric	6	\$2,071,067			
Metric	7	\$1,035,533						
Metric	8	\$1,035,533						
Project Subtotal		\$8,284,267	Project Subtotal		\$12,426,400	Project Subtotal		\$12,426,400
CAT 2: Innovations			CAT 2: Innovations			CAT 2: Innovations		
Annual Metric Base Value		\$3,349,333	Annual Metric Base Value		\$5,024,000	Annual Metric Base Value		\$5,024,000
Metric Base Value Adjusted for Proportional Allotment Factor		\$1,656,853	Metric Base Value Adjusted for Proportional Allotment Factor		\$2,485,280	Metric Base Value Adjusted for Proportional Allotment Factor		\$2,485,280
Project/ Metric	Optional Adjust- ment (%)	Metric Value	Project/ Metric	Optional Adjust- ment (%)	Metric Value	Project/ Metric	Optional Adjust- ment (%)	Metric Value
Project 2.1 BMC Simulation and Nursing Center			Project 2.1 Simulation and Nursing Center			Project 2.1 Simulation and Nursing Center		
Metric Base Value Adjusted for # Metrics		1.25000	Metric Base Value Adjusted for # Metrics		1.6666666666 6667	Metric Base Value Adjusted for # Metrics		2.50000
Metric	1	\$2,071,067	Metric	1	\$4,142,133	Metric	1	\$6,213,200
Metric	2	\$2,071,067	Metric	2	\$4,142,133	Metric	2	\$6,213,200
Metric	3	\$2,071,067	Metric	3	\$4,142,133			
Metric	4	\$2,071,067						

Project Subtotal			\$8,284,267
Project 2.2 Rapid Diabetes Referral and Follow-up			
Metric Base Value Adjusted for # Metrics		1.00000	
Metric	1	\$1,656,853	
Metric	2	\$1,656,853	
Metric	3	\$1,656,853	
Metric	4	\$1,656,853	
Metric	5	\$1,656,853	
Project Subtotal			\$8,284,267
Project 2.3 Project RED			
Metric Base Value Adjusted for # Metrics		0.714285714 285714	
Metric	1	\$1,183,467	
Metric	2	\$1,183,467	
Metric	3	\$1,183,467	
Metric	4	\$1,183,467	
Metric	5	\$1,183,467	
Metric	6	\$1,183,467	
Metric	7	\$1,183,467	
Project Subtotal			\$8,284,267
CAT 3: Payment Reform			
Annual Metric Base Value		\$3,349,333	

Project Subtotal			\$12,426,400
Project 2.2 Rapid Diabetes Referral and Follow-up			
Metric Base Value Adjusted for # Metrics		1.25000	
Metric	1	\$3,106,600	
Metric	2	\$3,106,600	
Metric	3	\$3,106,600	
Metric	4	\$3,106,600	
Project Subtotal			\$12,426,400
Project 2.3 Project RED			
Metric Base Value Adjusted for # Metrics		0.7142857142 85714	
Metric	1	\$1,775,200	
Metric	2	\$1,775,200	
Metric	3	\$1,775,200	
Metric	4	\$1,775,200	
Metric	5	\$1,775,200	
Metric	6	\$1,775,200	
Metric	7	\$1,775,200	
Project Subtotal			\$12,426,400
CAT 3: Payment Reform			
Annual Metric Base Value		\$5,024,000	

Project Subtotal			\$12,426,400
Project 2.2 Rapid Diabetes Referral and Follow-up			
Metric Base Value Adjusted for # Metrics		0.8333333333 33333	
Metric	1	\$2,071,067	
Metric	2	\$2,071,067	
Metric	3	\$2,071,067	
Metric	4	\$2,071,067	
Metric	5	\$2,071,067	
Metric	6	\$2,071,067	
Project Subtotal			\$12,426,400
Project 2.3 Project RED			
Metric Base Value Adjusted for # Metrics		0.7142857142 85714	
Metric	1	\$1,775,200	
Metric	2	\$1,775,200	
Metric	3	\$1,775,200	
Metric	4	\$1,775,200	
Metric	5	\$1,775,200	
Metric	6	\$1,775,200	
Metric	7	\$1,775,200	
Project Subtotal			\$12,426,400
CAT 3: Payment Reform			
Annual Metric Base Value		\$5,024,000	

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Metric Base Value Adjusted for Proportional Allotment Factor		\$1,656,853
Project 3.1: ACO Development		
Metric Base Value Adjusted for # Metrics		1.00000
Metric	1	\$1,656,853
Metric	2	\$1,656,853
Metric	3	\$1,656,853
Metric	4	\$1,656,853
Metric	5	\$1,656,853
Project Subtotal		\$8,248,267
Project 3.2: Learning Collaborative		
Learning Collaborative Annual Metric Base Value		\$837,333
Metric Base Value Adjusted for Proportional Allotment Factor		\$414,213
Metric Base Value Adjusted for # Metrics		5.00000
	Optional Adj. (%)	
Metric 1		\$2,071,067

Metric Base Value Adjusted for Proportional Allotment Factor		\$2,485,280
Project 3.1: ACO Development		
Metric Base Value Adjusted for # Metrics		1.00000
Metric	1	\$2,485,280
Metric	2	\$2,485,280
Metric	3	\$2,485,280
Metric	4	\$2,485,280
Metric	5	\$2,485,280
Project Subtotal		\$12,426,400
Project 3.2: Learning Collaborative		
Learning Collaborative Annual Metric Base Value		\$1,256,000
Metric Base Value Adjusted for Proportional Allotment Factor		\$621,320
Metric Base Value Adjusted for # Metrics		2.50000
	Optional Adj. (%)	
Metric 1		\$1,553,300
Metric 2		\$1,553,300

Metric Base Value Adjusted for Proportional Allotment Factor		\$2,485,280
Project 3.1: ACO Development		
Metric Base Value Adjusted for # Metrics		1.00000
Metric	1	\$2,485,280
Metric	2	\$2,485,280
Metric	3	\$2,485,280
Metric	4	\$2,485,280
Metric	5	\$2,485,280
Project Subtotal		\$12,426,400
Project 3.2: Learning Collaborative		
Learning Collaborative Annual Metric Base Value		\$1,256,000
Metric Base Value Adjusted for Proportional Allotment Factor		\$621,320
Metric Base Value Adjusted for # Metrics		2.50000
	Optional Adj. (%)	
Metric 1		\$1,553,300
Metric 2		\$1,553,300

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Project Subtotal		\$2,071,067	Project Subtotal		\$3,106,600	Project Subtotal		\$3,106,600
CAT 4: Population Health			CAT 4: Population Health			CAT 4: Population Health		
Annual Metric Base Value	N/A		Annual Metric Base Value	\$3,078,431		Annual Metric Base Value	\$2,907,407	
Metric Base Value Adjusted for Proportional Allotment Factor	N/A		Metric Base Value Adjusted for Proportional Allotment Factor	\$1,522,843		Metric Base Value Adjusted for Proportional Allotment Factor	\$1,438,241	
Metric Base Value Adjusted for # Metrics	N/A		Metric Base Value Adjusted for # Metrics	\$1,232,778		Metric Base Value Adjusted for # Metrics	\$1,176,742	
# Measures Reported	N/A		# Measures Reported	21.00000		# Measures Reported	22.00000	
Category 4 Subtotal		\$0	Category 4 Subtotal		\$25,888,333	Category 4 Subtotal		\$25,888,333
Plan Approval (50% total annual allotment) \$51,776,667								
Annual Target Total		\$103,553,333	Annual Target Total		\$103,553,333	Annual Target Total		\$103,553,333